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ABSTRACT

A task force on school library media issues was appointed in Wisconsin to describe the current program status in the state; identify those factors that are preventing the fulfillment of the library media program's mission--that every student in public elementary and secondary schools in Wisconsin has a right to a comprehensive program of library media services--and make recommendations for state action. The task force identified eight major issues that play an integral role in the school library media program. Each issue is addressed in a separate chapter: (1) library media program philosophy; (2) library media specialist as curriculum partner; (3) library media education and staff development; (4) library media program staffing; (5) library media programs and technology; (6) library media facilities; (7) library media collections and resources; and (8) library media financing and budgeting. Each chapter includes background information, an analysis of library media center needs related to that issue, and recommendations. Five appendixes contain the guidelines for personnel, staffing ranges based on program philosophy, school library media expenditures, per pupil expenditures for instructional media, and anticipated expenditures for 1989-90. (27 references) (MAB)

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Leadership for the 90's

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Final Report of the State Superintendent's Task Force on School Library Media Issues

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Wisconsin Department of Public Instruction / Herbert J. Grover, State Superintendent

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Leadership for the 90's

Final Report of the State Superintendent's

Task Force on School Library Media Issues

August 1990

Wisconsin Department of Public Instruction

Herbert J. Grover, State Superintendent

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School District of River Falls
River Falls, Wisconsin 54022

July 30, 1990

Dr. Herbert J. Grover
State Superintendent
Department of Public Instruction
125 South Webster Street
P. O. Box 7841
Madison, WI 53707-7841

Dear Dr. Grover:

We are pleased to submit to you the final report of the Task Force on School Library Media Issues. The Task Force spent ten months identifying issues, researching background information, and forming recommendations. It is believed that this report establishes a leadership agenda for the Wisconsin School Library Media Program as we prepare for the turn of the century.

Seventy-one recommendations organized around eight major areas were developed by the Task Force. As a summative activity, each member ranked the recommendations as a whole. The official adoption by the State Superintendent of the philosophy for school library media services as developed by the Task Force was the consensus selection as the top priority recommendation. Adequate staffing at both building and district levels was rated second, and the third-ranked area centered on technology and its proper place within the school library media program. All the issues are important and interrelated to the extent that it is impossible to implement one recommendation without impacting another.

Sincere appreciation is extended to the Bureau for Instructional Media and Technology staff members who assisted the Task Force in its deliberations. We also want to thank you for giving us the opportunity to serve on this Task Force.

A report has been developed which sets an ambitious but attainable agenda for school library media programs in Wisconsin. The Task Force members are committed to assisting in any way possible with the next step in carrying these concerns forward.

Sincerely,

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Introduction

The Charge

State Superintendent of Public Instruction Herbert J. Grover appointed the Task Force on School Library Media Issues in August, 1989 to "describe the current program status in Wisconsin schools, identify those factors which are preventing us from fulfilling the appropriate mission of library media programs, and make recommendations for state action." The state superintendent asked that this report be delivered to him by July 1, 1990.

The Process

The Task Force held its first meeting on September 14, 1989. At that time several resource documents were reviewed. These included *Information Power: Guidelines for School Library Media Programs, School Library Media Programs: A Resource and Planning Guide,* and the American Library Association's *Final Report of the Presidential Committee on Information Literacy*. Many other resources were used throughout the process and are listed in the references for this report.

An extremely useful source of information on the current status of school library media programs was a database created from a building level survey of library media programs conducted by the Bureau for Instructional Media and Technology in the fall of 1988. This 14 page survey was sent to every school building in Wisconsin to collect library media program statistics. A 1989 survey related to instructional computing and a 1990 survey of district level media directors, provided additional information. The latter two were random sample surveys. Copies of all three survey instruments, as well as data from the surveys, are available from the Bureau for Instructional Media and Technology.

After reviewing the resource documents, the Task Force identified eight topics around which it decided to develop issue papers and recommendations. The Task Force held six meetings at which the members worked on the eight papers, which had been developed by the bureau staff.

This report will be the major focus of the State Superintendent's Conference for District Media Directors to be held in Madison on September 28, 1990. At this conference participants will examine the report and the recommendations and discuss implementation strategies. It is expected that this report will be an important factor in setting a school library media agenda for Wisconsin in the 90s.

The Philosophy

The Task Force felt that, to establish a foundation for its work, it was necessary to

develop a philosophy. That philosophy, as stated in Issue 1, is that every student in public elementary and secondary schools in Wisconsin has a right to a comprehensive program of library media services, as delineated in *School Library Media Programs* and *Information Power*.

The other seven issues are developed with the understanding that this is the vision for Wisconsin schools. The task before us now is to use the work of the Task Force to move Wisconsin toward this vision.

Notes on the Text

The majority of this printed report consists of the eight issues, which are treated as chapters. Each issue contains a background section, an analysis of the needs, and recommendations.

To save space, the shortest understandable form was used for frequently used titles and expressions. The reader may find the following list helpful.

Short	Full
The department	Wisconsin Department of Public Instruction (DPI)
The bureau	Bureau for Instructional Media and Technology (BIMT), part of DPI
The state superintendent	Wisconsin State Superintendent of Public Instruction
CESA	Cooperative Educational Services Agency
LMC	Library Media Center
WEMA	Wisconsin Educational Media Association
WLA	Wisconsin Library Association
WASL	Wisconsin Association of School Librarians (a division of WLA)
Library media survey	*School Library Media Services in Wisconsin: A Building Level Survey*

After the full wording of a lengthy title is used once in a chapter (issue), the shorter title is used for the remainder of that issue. For example, *Information Power: Guidelines for School Library Media Programs* becomes *Information Power*.

Bibliographic citations follow a style endorsed by the American Psychological Association, and some abbreviations are used to make the citations as brief as possible in the text.

Abbrev.	Full Title
AASL	American Association of School Librarians
AECT	Association for Educational Communications and Technology
ALA	American Library Association
NEA	National Educational Association

Issue 1

Library Media Program Philosophy

Question

What philosophy should guide the development of Wisconsin's public elementary and secondary school library media programs to enable them to provide a program of library media services and operations appropriate to implementing today's educational goals and objectives through the 1990s and into the 21st century?

Background

American society is changing rapidly. The employment base is changing from a predominantly manufacturing to a predominantly service base. It is estimated that information workers now make up more than half of the U.S. labor force (Cleveland, 1985, p. xviii). Demographically, American society is increasingly pluralistic in nature. The amount of information is expanding at an unprecedented rate, and great changes are occurring in the technology for storing, organizing and accessing the ever growing base of information. Out of this base, people need to be able to obtain specific information to meet a wide range of personal and business needs. These needs are largely driven either by the desire for personal growth and advancement or by the rapidly changing social, political, and economic environments of contemporary society. What is current today is often outdated tomorrow. Today's job might be obsolete tomorrow. The American Library Association's Presidential Committee on Information Literacy recognized that to promote economic independence and quality of existence, there is a lifelong need for being informed and information literate (ALA, Committee on Information Literacy, 1989, p. 1).

The technology that connects us to this growing body of information is affecting every aspect of our lives. Forty years ago computers were housed in rooms the size of gymnasiums. Today computers 1000 times as powerful fit in a suitcase. Less than 15 years ago the first microcomputer was marketed. Currently it is estimated that there are over 50 million microcomputers at home, in the office, and in the schools. CD-ROM (compact disc - read only memory) disks the size of coffee cup saucers contain entire encyclopedias with room to spare and run on currently available microcomputers. Satellite, narrowcast and broadcast television, and microwave and fiber optics technologies transport massive amounts of voice, data, and video information to the classroom, the library media center, the home, and the workplace. This technology base has placed large amounts of information power in the hands of those who know how to operate the equipment.

Schools must avail themselves of this information power. An information age school should be interactive, a place where students become learning partners with other students, the teachers, and the community at large. Teachers should become coaches and guides rather than lecturers, using the classroom computer with its access to the libraries and databases of the world as the link to the sources of facts and information. Teachers should work consistently with librarians, media resource people, and instructional designers both within their schools and in their communities to ensure that student projects and explorations are challenging, interesting, and productive learning experiences. Evaluation of student progress should be based upon a broad range of literacy indicators, including some that assess the quality and appropriateness of information sources or the quality and efficiency of the information searches themselves. Assessments should attend to ways in which students are using their minds and achieving success as information consumers, analyzers, interpreters, evaluators, and communicators of ideas (p. 15).

Information literacy is a survival skill in the information age. Instead of being overwhelmed by the abundance of information resources available, information literate people should know how to find, evaluate and use information effectively to solve problems and make decisions, whether this information resides in a computer, in a book, on a film, or in any other storage medium.

The proliferation of information resources, the growing need for information and learning skills, and the development of new technologies have broadened and redefined the mission of the school library media program and the role of the library media specialist. Both public libraries and school library media centers, which provide significant public access points to such information, must play key roles in preparing people for the demands of today's and tomorrow's information society (p. 10-11).

Philosophy

To guide the development of Wisconsin's public elementary and secondary school library media program this task force adopts as its philosophy: **That every student in public elementary and secondary schools in Wisconsin has a right to a comprehensive program of library media services,** as delineated in *School Library Media Programs: A Resource and Planning Guide* (Hopkins, 1987) and *Information Power: Guidelines for School Library Media Programs* (AASL, 1988) and further defined by the department.

This philosophy includes, as goals, the ability of students to solve problems and to communicate effectively, as well as the capacity to become self directed learners and to enjoy learning. This means that students need to learn to locate information, to interpret and reflect on it, to react to ideas and form judgments, to think creatively and critically, to organize information and ideas, to express themselves clearly in written and oral form, and to enjoy the process of learning.

Mission of the School Library Media Program

As detailed in *Information Power* (p. 1), the mission of the library media program is to ensure that students and staff are discriminating and effective users of ideas and information. This mission is accomplished by providing intellectual and physical access to materials in all formats; by instruction to foster competence and stimulate interest in reading, viewing, and using information and ideas; and by collaboration between library media specialists and other educators to design learning strategies to meet the needs of individual students.

Many of the activities essential to achieving these learning goals lie either partially or completely within the scope of school library media programs. Examples are

- using libraries and other information sources to find information,
- choosing items to read, listen to, or view,
- reflecting on thoughts and ideas encountered,
- practicing reading, listening, and viewing skills,
- practicing strategic learning skills,
- discussing what is read, heard, etc., with peers,
- using computers to gather and process information,
- organizing information and ideas for individual or group presentations,
- communicating using a variety of media, and
- enjoying literature and other cultural expressions in many formats and genres.

All schools strive to help each child realize his or her individual potential, regardless of background or academic ability. Because it provides variety in resources and activities, a library media program can serve the diverse interests, learning styles, maturity levels, and abilities of different learners.

How well these needs are served and the schools' educational objectives are met depends on the existence and quality of certain components of the library media program. These components are

- library media facilities,
- collection of resources,
- access to the collection,
- information services,
- number and competence of professional and support staff,
- policies and procedures, and
- integration of the library media program into the curriculum and teaching activities in all grades and subject areas.

Deficiencies in these components of a library media program can impede the development of problem solving skills, self directed learning, skillful communication, and enthusiasm for learning. Without access to professionally staffed library media cen-

ters in their schools, students will have difficulty learning to use libraries and information sources. Their ability to reflect on ideas and to form judgments will be curtailed if their resource base is restricted to textbooks and a small classroom collection or if the media center collection is not guided by an appropriate selection policy. Lifelong learning will not be attained if the resources do not provide sufficient challenge, variety, currency, or comprehensiveness.

Recommendations

1. The state superintendent should adopt and promote as his philosophy: Every student in public elementary and secondary schools in Wisconsin has a right to a comprehensive program of library media services as defined by the department.

2. The bureau should work with teacher education institutions, CESAs, professional associations, library media specialists, school administrators, and school boards to disseminate as widely as possible this philosophy and its implications for the operation and support of library media programs.

3. The department staff should take this philosophy into consideration when they monitor compliance with the State of Wisconsin's twenty educational standards.

4. This philosophy should be promoted among consultant staff within the department and outside the department at conferences and other functions.

Issue 2

Library Media Specialist As Curriculum Partner

Question

What steps are necessary at the state level to ensure that library media specialists fulfill the roles of teacher and instructional consultant as described in *Information Power; Guidelines for School Library Media Programs*?

Background

The role of the library media specialist in the instructional program of the school has been an evolving one. According to David Loertscher, researcher and library educator, the role began as a keeper of a warehouse of books which served as an adjunct to the classroom, but evolved into a manager of a place where books and a variety of audiovisual materials could be used as well as produced. Today the expectation is that the library media specialist will be fully involved in the teaching/learning process (Loertscher, 1988, p. 1).

Information Power sets this role in the context of "the collaborative efforts of all those who are responsible for student learning" (AASL, 1988, p. 21). *Information Power* envisions the library media specialist as responsible for ensuring that "skills, knowledge, and attitudes concerning information access, use, and communication are an integral part of the school curriculum" (p. 31-32). The document further suggests that the library media specialist will be a partner in curriculum development teams at both the building and district levels.

The role of the library media specialist in curriculum and instruction is further articulated in *School Library Media Programs; A Resource and Planning Guide.* According to the guide, "The library media program and staff must contribute actively to the teaching/learning process" (Hopkins, 1987, p. 3). The guide also includes the "Library Media Center Taxonomy of Involvement in Instruction," by David Loertscher (p. 41), which clearly outlines a scale for measuring involvement with the curriculum; and "Library Media Specialists and Curriculum Planning" (p. 37-38), which specifies that "Teamwork in planning and teaching is the key to a successful library media skills instruction program." This state publication delineates the clear expectation that each library media program will integrate its services and instruction

with the ongoing curriculum of the school.

This relatively new role definition at both the national and state levels asks that the library media specialist perform the following tasks:

- Integrate library information skills in all subject areas
- Participate in curriculum development committees
- Plan instructional units with classroom teachers
- Participate in teaching and evaluating student achievement

The fulfillment of this role is crucial if schools expect to meet the challenges put forth in the *Final Report of the American Library Association's Presidential Committee on Information Literacy*, in which it is stated that the ability of our citizens not only to access information but also to interpret and use information will be necessary for our survival as a democratic society. "Citizenship in a modern democracy involves more than knowledge of how to access vital information. It also involves a capacity to recognize propaganda, distortion, and other misuses and abuses of information" (ALA, Committee on Information Literacy, 1989, p. 9).

Indicators of Need

Current Status

In 1988, the department completed a major survey of library media programs in the state's public schools (Sorensen, 1988). The survey gives some indications of how library media specialists are carrying out the role of curriculum partner. Four of the questions from the survey deal with the involvement of the library media specialist in the curriculum.

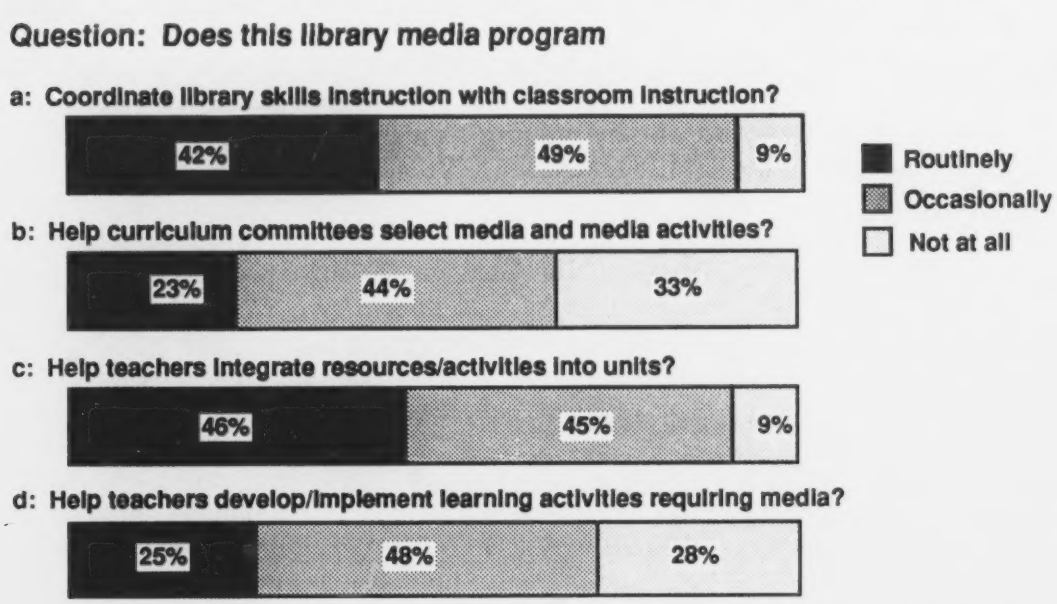
a. Does this library media program coordinate library media skills instruction with classroom instruction?

b. Does this library media program assist curriculum committees in selecting appropriate materials and library media program activities for resource units and curriculum guides?

c. Does this library media program help individual teachers coordinate (integrate) library activities and resources with subject areas, units and textbooks?

d. Does this library media program help teachers develop, select, implement and evaluate learning activities requiring various types of media?

The chart shows how the library media specialists answered these questions.



While it is difficult to make general statements about levels of role fulfillment, it is clear that participation on a routine basis occurs in only 25 percent of schools for two of the activities and a little less than 50 percent for the other two activities. Questions **a** and **c**, which dealt with coordination of library media skills instruction with classroom instruction, showed the highest level of occurrence. This may show a positive impact of the high visibility given to this type of activity by the Bureau for Instructional Media and Technology, especially with the publication of the *Matrix for Curriculum Planning in Library Media and Information Skills Education* (Anderson, 1989). It may also be a reflection of the fact that these two are the most traditional role expectations of the four activities listed. In questions **b** and **d**, which address curriculum development and partnership with teachers, nearly 1/3 of the schools indicate the activity is not done at all.

The curriculum partner role is demanding in a number of ways. First, it requires that library media specialists be prepared as experts in information resources and access, and in curriculum and instructional design. Second, it requires that administrators and classroom teachers view library media specialists as equal partners in the instructional process. Third, it requires that the school districts provide sufficient professional and support staff to carry out the tasks related to this role. Fourth, it requires that the scheduling of the library media center be flexible so that the staff and the facility are available for the partnership role. Each of these will be discussed in detail.

Preparation for Curriculum Role

In terms of preparation of library media specialists for this role, Wisconsin has moved to meet this challenge by its relatively new certification structure. To be licensed as an "instructional library media specialist" at the entry level, a person must complete a teacher preparation program as well as a library media preparation program. This must include student teaching both as a library media specialist and as a classroom teacher. Within five years this initial license must be replaced with a permanent license that requires 15 additional credits in course work intended to develop library media specialist role competencies. This course of study should ensure that a person is adequately trained as an information expert and is competent in curriculum and instructional design. Every college or university which has state approved instructional library media licensure programs is reviewed by department staff every five years. The review process ensures that each competency is addressed.

However, the majority of library media specialists working in schools today received their education prior to the new certification requirements. They may or may not have participated in continuing education opportunities that focus on curriculum related competencies.

Colleagues' Views

There is little data to show the attitude of administrators and teachers toward library media specialists in this role. However, some research has begun in this area. "Principals' Perceptions of Libraries: A Survey," appeared in the January 1989 issue of *School Library Journal*. It describes a small study dealing with principals' and library media specialists' role expectations and perceptions. The data gives a mixed picture. In the ideal allocation of time the library media specialists recommended 50 percent for instruction whereas the principals recommended 20 percent. Nevertheless, principals thought their library media specialists should spend more time on instructional activities than they currently do. The authors suggest that the library media specialists themselves will have to take action to correct the expectations and perceptions of principals (Edwards, 1989, pp. 28-31).

In "The Consulting Role of the School Library Media Specialist: A Review of the Literature," Philip Turner and Stephen Zsiray found that:

- Very little instructional design consultation has been practiced by school library media specialists, and the attitude toward such practice is mixed.
- School library media specialists with well-developed interpersonal skills, competence in instructional design, the backing of the principal, and logistical support are more likely to work with their teachers.
- Little is known about the impact of instructional consultation by the library media specialist on student or teacher behavior (Turner, 1989, p. 2).

One negative indicator of how principals in Wisconsin view the curriculum role of library media specialists is that classes are often scheduled into the LMC so that the classroom teacher can use that period for his/her preparation time. This not only precludes the possibility of cooperative teaching but also makes it unlikely that teachers have knowledge of the library media skills which are being taught.

Administrative rule PI 4 requires that schools of education include information about the role of the school library media program and the use of instructional media and technology in their undergraduate programs. However, as the department staff review programs at colleges and universities, it is evident that currently such inclusion is weak at best. Examination of several teaching methods textbooks, for example, revealed no mention of the school library media center or program. At a meeting of university librarians at the 1989 Wisconsin Library Association Conference, participants confirmed the impression that university students are still not mastering library use skills as well as they should. More thorough preparation of all educators in compliance with PI 4 should result in classroom teachers and administrators who understand and support the library media specialist. Continuing education will be necessary in order to reach those teachers and administrators already in the field without this preparation.

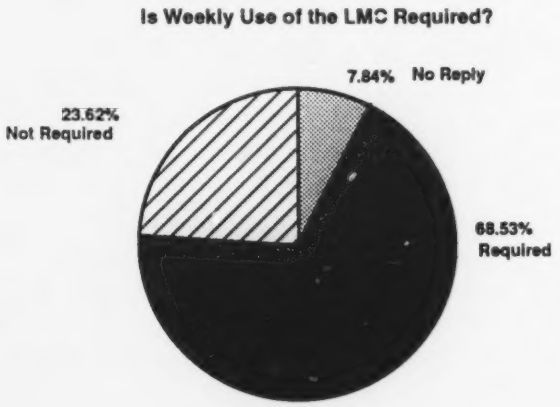
Adequate Staff

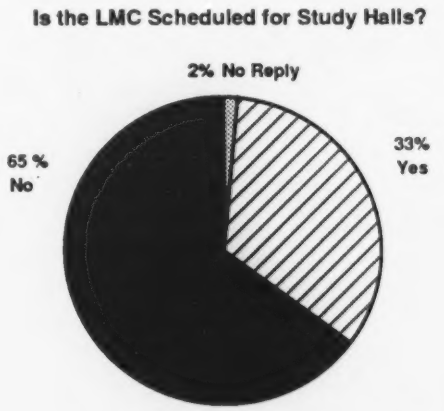
Adequate staffing for the curriculum partner role appears to be lacking in most schools. Data from the library media survey shows that only 27 percent of buildings with LMCs have the ratio of professional staff to students which is recommended in *School Library Media Programs* (Hopkins, 1987, p. 7). That is, 27 percent of schools with LMCs have a ratio of one professional for 300-500 students. Even when professional and support staff are combined, the picture does not improve. Thirty-one percent of schools have a ratio of one staff person for 300-500 students. This indicates that support staff are not being used to increase the staff to student ratio substantially. Another measure of inadequacy is the fact that only 38 percent of all buildings with LMCs have one full-time professional.

Flexible Scheduling

Karen Stevens Browne explained in a recent *School Library Journal*, "flexibility provides time for students and classes to use the media center whenever library media skills can be applied to a course of study or a class project. A freer schedule allows more time for independent study and occasions for the media specialist to work directly with individuals" (Browne, 1989, p. 20). Flexible, cooperative scheduling of the LMC between classroom teachers and the library media specialist is necessary for meaningful integration of library skills instruction and library resources in the curriculum. No statistics on the prevalence of flexible scheduling of the LMC in Wisconsin schools are available. However, data from the 1988 library media survey

shows that 68.5 percent of Wisconsin's elementary LMCs have required weekly class use and that 33 percent of the high schools use the LMC as a scheduled study hall. More information is needed to determine how restrictive required weekly class use is for the curriculum partner role, but it is clear that scheduling the LMC for a regular study hall or filling it with elementary classes 70 percent of the day impedes its ability to serve all students as an information center.





One can conclude that, in order to increase the role of the library media specialist as a curriculum partner, deficiencies in the areas of professional preparation, attitudes of colleagues, and amount of staff must be addressed. Information about the status of flexible scheduling should also be collected.

Recommendations

1. The department should give priority to analysis of certification requirements to ensure that competencies necessary for the library media specialist to function as a curriculum partner are being developed in university programs that train library media specialists.

2. The bureau should develop a plan, in cooperation with colleges and universities, CESAs, school districts, and professional associations, for new and innovative credit bearing staff development opportunities for personnel already in the field to ensure that they develop the competencies necessary for this curriculum role. This plan should include the use of distance education and other emerging technologies.

3. The department should continue to work through the certification review process to move schools of education toward full implementation of administrative rule PI 4.09(12), which requires study and use of the library and other instructional resources; and PI 4.09(13), which requires study of school

instructional media programs, experience in evaluating and using instructional materials and equipment including computers, and experience in creating graphic and audiovisual materials designed to meet specific learning objectives.

4. The department should work with colleges and universities to assure that course work that provides an understanding of the library media program in the schools is part of the administrator training programs.

5. The department should work with at least one teacher preparation program to develop a model program, containing an evaluation and research component, which develops the required competencies for both library media specialists and classroom teachers.

6. The bureau should work with universities and professional associations at both the state and national levels to support ongoing research and initiate new research to investigate the curriculum role for school library media specialists.

7. The department should seek funding opportunities for projects, such as the Rural Wisconsin Reading Project, which demonstrate the curriculum partner role of the school library media specialist in order to build models in the field for administrators and teachers to consider.

8. The bureau should work with WEMA, WLA, and other professional associations to incorporate opportunities to describe and promote the role of the library media program to classroom teachers, administrators, curriculum personnel, principals, school boards, parents, and the general public through conferences and publications.

9. The bureau should seek funds to plan and hold workshops and/or develop accompanying video material for district teams of classroom teachers, principals, curriculum directors, and library media specialists to explore the curriculum role in the resource based learning environment. Similar workshops should target school district staff responsible for screening and hiring new teachers.

10. The state superintendent should establish a task force to revise the *Guide to Curriculum Planning in Computer Education*, combining it with the *Matrix for Curriculum Planning in Library Media and Information Skills*, and creating a comprehensive library media/information skills curriculum guide which

    - illustrates close relationships between computer literacy and library media skills, and

- provides matrixes and explanatory information to help teachers and library media specialists integrate these concepts and skills into classroom curriculum.

11. The department should take a position supporting flexible scheduling of LMCs, develop options for implementing flexible scheduling, and use all avenues available to explain and promote this model to all possible audiences as a way to achieve integrated skills instruction.

12. The bureau should conduct a random sample survey of Wisconsin schools to determine attitudes of teachers, principals, and library media specialists toward flexible scheduling for library media centers and identify the reasons it is used or not used in Wisconsin schools.

13. The department should use as criteria for reviewing library media programs during the standards review process

    - integrated library media skills curriculum,
    - teaching partnerships between library media specialists and classroom teachers, and
    - flexible scheduling of the LMC.

14. The bureau and professional associations should update the job description for library media specialists to reflect the curriculum partnership with classroom teachers.

15. Communication and collaboration within the department should continue between the bureau and the Division for Instructional Services.

Issue 3

Library Media Education and Staff Development

Question

What is needed to prepare professionals to manage and operate library media programs in the 1990s and beyond?

Background

The expectations held by the public for today's educational process place a stronger, clearer emphasis on the need to deal effectively with the great quantity of information that will be available to them in the future. Many futurists have predicted a continuing doubling of knowledge, and therefore, information, at a steadily increasing rate (Benjamin, 1989, p. 8-14). Consequently, the goals of tomorrow's curriculum place high on the list of priorities the ability for graduates to

- locate needed information,
- analyze information,
- select relevant information,
- evaluate information for accuracy and bias,
- read, listen, view, and think critically,
- apply information to solving problems and meeting educational, vocational, and personal needs,
- organize information and create new knowledge, and
- communicate information effectively.

In addition, there is wide acceptance of the need to nourish students' physical, mental, and emotional health and to develop their ability not only to learn on their own, but also to enjoy the process of acquiring knowledge and to appreciate the inspiration they derive from contact with other people and their ideas.

As stated in the issue paper on philosophy, all of these general educational goals fall within the scope of the school library media program. This is acknowledged by significant publications in the library media field. *Information Power; Guidelines for School Library Media Programs*, states that the mission of the library media program is "to ensure that students and staff are effective users of ideas and information"

(AASL, 1988, p. 1). The publication goes on to list the objectives needed to carry out this mission. These objectives and the specific responsibilities grouped under the library media specialist's threefold role of information specialist, teacher, and instructional consultant make clear that the school library media program has major responsibilities in accomplishing these general educational goals (p. 26-39).

School Library Media Programs, A Resource and Planning Guide (Hopkins, 1987, p. 1) and *Matrix for Curriculum Planning in Library and Information Skills Education* (Anderson, 1989, p. 3) also identify the library media program as the area within the school that provides the greatest support for accomplishing these goals.

Following is a list of specific responsibilities for the threefold role of the library media professional, drawn from these three publications.

1. Information specialist

    - locate information in all its formats
    - bring information to users in the most usable form
    - analyze, interpret, and evaluate information
    - select appropriate resources for the school library media center
    - organize resources for efficient access
    - manage the financial, physical, and human components of the instructional media program, which would include use of computers and telecommunications as well as printed and audiovisual media in teaching and learning throughout the school

2. Teacher

    - structure learning to enable students to find, interpret, evaluate, and use resources and information to meet educational, vocational, and personal needs
    - structure learning so students develop literary appreciation
    - promote students' enjoyment of acquiring knowledge and ideas

3. Instructional consultant

    - apply information to the needs of the curriculum as well as to the needs of the individual programs, teachers, and students
    - bring together or modify existing media to develop effective resources for teaching and learning
    - produce new instructional media in printed, audiovisual, and electronic formats
    - collaborate with other teachers in creating an effective learning environment, designing effective instruction, developing appropriate learning activities for students, and evaluating student progress

The problem is that the library media specialist's threefold role of information specialist, teacher, and instructional consultant places a heavy responsibility on the professional preparation program as well as on the professionals themselves. In order to function properly, school library media specialists must not only be very knowledgeable about curriculum design, teaching, library and information science, educational technology, human relations, and effective interpersonal communication; but they must also have a strong interest and good education in all subject areas. It has become increasingly difficult for universities to squeeze the necessary coursework into existing programs, whether on the undergraduate or graduate levels.

However, national studies of teacher education are demanding even more. Two major reports, *Tomorrow's Teachers* (Holmes Group, 1986, p. 11) and *A Nation Prepared* (Carnegie Forum, 1986, pp. 3 and 70), recommend an undergraduate preparation in the liberal arts with more rigorous mastery requirements, followed by a strong graduate program in the science of teaching. The American Library Association's accreditation standards also require a liberal arts emphasis in the candidate's undergraduate preparation (American Library Association Committee on Accreditation, 1972, p. 8). It is not clear from these reports whether a specialty field, such as the school library media specialist, would follow or be part of this graduate education program.

A master's degree in library media may be needed as an entry level requirement. The American Library Association states that the master's degree is the "first professional degree" (p. 2). A number of professional licenses in Wisconsin already require the master's degree for initial certification. These include:

- Speech and Language Pathologist
- School Social Worker
- School Counselor
- School Psychologist
- School Administrator
- School Business Manager

In Wisconsin, there are two alternatives for obtaining a school library media specialist license today:

a. an undergraduate program with a major in elementary or secondary teaching and a 24 credit minor in library media services

b. a master's program in school library media services following an undergraduate degree with a major in elementary or secondary teaching

Because the person seeking the library media license usually has an undergraduate major in elementary or secondary education, Wisconsin's school library media specialist preparation programs do not have as strong a liberal arts emphasis as the national association considers ideal. However, Wisconsin requires all teacher education programs to assure that general education courses constitute at least 1/3 of the

total undergraduate education program for elementary and secondary teachers. Therefore, Wisconsin's education majors are somewhat better prepared than those from some other states.

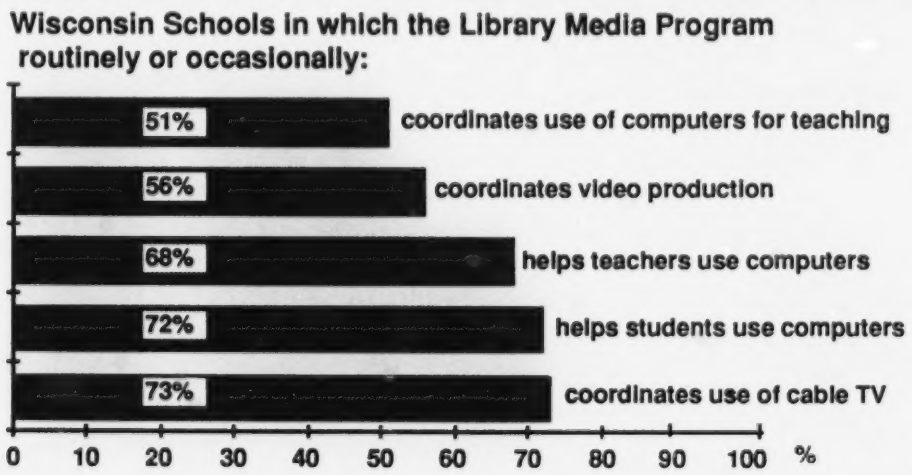
Simply requiring the master's degree will not solve the problem, however. Most candidates for library media positions see the existing preparation as a commitment of time and money for which the eventual payoff is not sufficiently compensatory. Most students attending Wisconsin colleges and universities already require more than four years to complete an undergraduate teacher education program, and since renewal of the initial library media license requires either a master's degree or 15 additional credits, the total time investment to obtain a library media specialist license is six to seven years for either alternative **a** or **b**.

A related problem is the need to update the professional qualifications of practicing library media specialists who were licensed many years ago and have found their job expectations increasing in scope.

Finally, there is a growing consensus among practicing library media specialists that, regardless of how much preparation one has in the many areas of responsibility, the job expectations are such that one person cannot meet them. Only where sufficient professional and support staff are present to carry out the diverse tasks is it reasonable to expect the library media specialist to manage the comprehensive program desired.

Indicators of Need

The 1988 Building Level Survey of School Library Media Services in Wisconsin (Sorensen, 1988) indicates that, where instructional computing, database searching, video production, or cable television are coordinated at the building level, the library media program is seen as the responsible agency in the great majority of cases. The chart provides specific data. However, library media professionals licensed prior to the late 1980's will not have had coursework in these technologies.



The total number of persons licensed and employed as school library media specialists dropped from 1430 to 1414 between 1987 and 1988. In many of the cases where bureau staff have asked about eliminated positions, district administrators have said that qualified candidates were unavailable.

In their contacts with the field, the department's library media consultants often hear experienced professionals say that, in addition to their program's being inadequately staffed, they feel insufficiently prepared to take on the ever expanding role of information specialist, teacher, and instructional consultant. Staffing needs are discussed in Issue 4.

The preparation of the staff responsible for the library media program is especially important now that the information age has brought with it not only more information, but more ways in which the information is packaged and made accessible. A thorough grounding in the liberal arts and teaching is still the basic foundation for the library media specialist; a knowledge of children's and young adult literature in audiovisual as well as the printed format is also required; management skills are essential; but the area of technical knowledge has expanded greatly, adding computer technology and electronic data storage and transfer to audiovisual communication, cataloging, and classification. It may be too much to expect anyone to master all aspects of operating a school library media program, regardless of the length of the preparation programs. A fresh look at job expectations and license requirements is needed, along with ways to help teachers and library media specialists update their knowledge and skills.

Recommendations

1. Taking into consideration the urgent need for qualified professionals, the state superintendent should appoint a task force immediately to

   - study the certification requirements for school library media professionals at both the building and district levels,
   - identify educational priorities for professional competence,
   - determine needed changes in the certification requirements,
   - assess the feasibility of requiring a master's degree for the initial license,
   - make recommendations for changes in the certification requirements for school library media professionals, including consideration of alternate routes for experienced teachers to obtain the instructional library media licenses, and
   - suggest priorities for continuing education to update current practitioners.

2. In the ongoing review process, bureau staff should assure that, in addition to the basic core of competencies, all currently approved library media specialist preparation programs include coursework that will prepare graduates to

   - use existing and emerging technologies,
   - coordinate instructional computing effectively at the school and district levels,
   - work effectively with professional and support staff who carry out the many diverse tasks within the library media program, and
   - make creative use of community resources such as local businesses, volunteer groups, and senior citizens.

3. Wisconsin colleges and universities should offer continuing education opportunities to update teachers and library media specialists in new information and instructional technologies.

4. The department should work with colleges, universities, CESAs, school districts, and professional associations to explore options, such as distance learning, adjunct faculty, and regional centers, for helping persons in all parts of the state to acquire the preparation for library media licenses without extensive travel and unnecessary cost.

5. School districts should provide incentives to assure that all teaching and administrative staff receive continuing education in new instructional technologies.

6. School district administrators should encourage successful teachers to consider the library media profession as a career enhancement option.

7. School districts, professional associations, teacher education programs, and the department should seek out and publicize tuition grant programs and other incentives to encourage teachers and library media staff to update their skills and knowledge related to instructional media and technology.

8. The state superintendent should continue the biennial Conference for District Library Media Directors and, in opposite years, sponsor conferences jointly with other statewide associations of teachers and school administrators to upgrade the knowledge and abilities of library media specialists.

9. School district administrators should provide encouragement and incentives to promote attendance by library media professionals at the state superintendent's conferences and the continuing education opportunities offered by CESAs and professional associations.

Issue 4

Library Media Program Staffing

Question

What action needs to be taken at the state level to assure that all school districts employ sufficient professional and support staff in library media programs to provide the leadership and expertise necessary to implement and maintain state requirements and the recommendations contained in this report?

Background

"The availability of professional staff is the single most crucial factor in determining the effectiveness of any library media program" states *School Library Media Programs: A Resource and Planning Guide* (Hopkins, 1987, p. 5). The guide goes on to pair this statement with the fact that professional staff must have support staff to free them for professional duties. *Information Power: Guidelines for School Library Media Programs* more fully defines current staffing needs in keeping with the new role of the library media specialist (Appendix A). These guidelines are even more important as we move into the 90's with rapidly changing technologies.

Building Level Staff

Information Power, numerous national researchers in the school library media field, and other sections of this report, emphasize the expanding role of the library media specialist at the building level. One noted researcher, David Loertscher, has developed an architectural model which illustrates the concept that the school library media program includes activities that require both professional and support staff. This model acknowledges the developing role of the library media specialist in instruction, as seen particularly in programs that support resource based teaching, a flexible teaching style that substitutes a wide variety of high quality printed and audiovisual materials for a basal reader or textbook (Loertscher, 1988, p. 7).

School Library Media Programs draws a clear relationship between a library media program's philosophy and level of services on the one hand and the number of staff members available to do the work on the other. Both the national and state guidelines cited above recommend at least one full-time professional and one full-time support staff person for each building level LMC. Wisconsin recommendations, found in *School Library Media Programs* (Hopkins, 1987, pp. 7-8), also relate staffing to

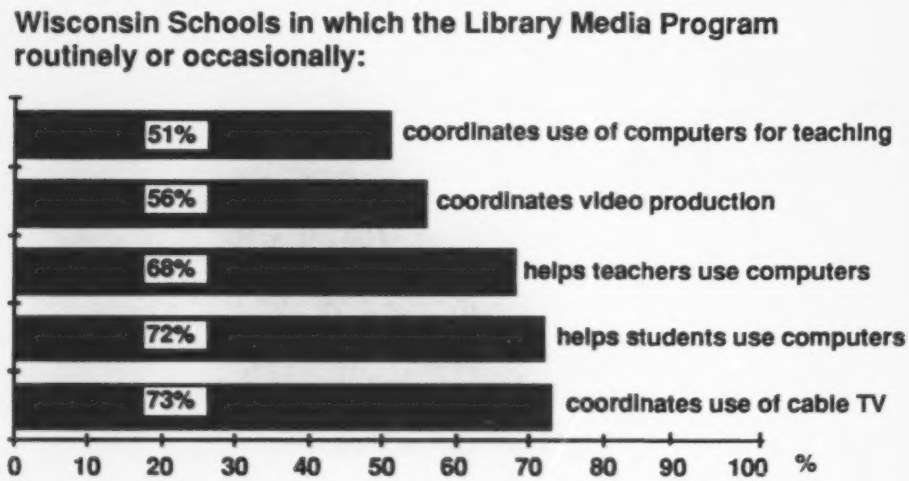
the enrollment and services provided (Appendix B).

State and national publications are not alone in making recommendations in this area. Wisconsin law s. 121.02 (1)(h), commonly known as "Standard (h)," has specific requirements to be applied to school library media programs. The applicable section states: "The school board shall provide adequate instructional materials, texts, and library services which reflect the cultural diversity and pluralistic nature of American society."

The department's administrative rule PI 8.01(2)(b) relating to this standard requires that

- all students in grades K-6 shall be provided with library media services performed by or under the direction of department certificated library and audiovisual personnel, and
- all students in grades 7-12 shall be provided with library media services performed by department certificated library and audiovisual personnel.

These services alone require a substantial commitment of time, but since 1987, library media programs have been increasing in scope of responsibility. Many districts have added instructional computing, distance education and participation in resource sharing. An indication of the high percentage of library media programs which are responsible for some of these activities is shown in this graph. Statistics are taken from results of the 1988 Building Level Survey of School Library Media Services in Wisconsin (Sorensen, 1988).



Since the survey was completed, even more information technologies have been added to the responsibilities of the library media program. Each of these relatively new educational services are logical components of the library media program and can be most effective when placed there. However, they are often added at the

expense of other services, or they may constitute an overload causing general stress and dissatisfaction that reduces the effectiveness of the program. It is essential that increased responsibilities be matched with increased staff.

District Level Staff

Standard (h) also requires that a department certificated person in the library media field be designated to provide direction and coordination for the district's library media program.

While this is a general mandate, the department's *School Library Media Programs* makes more specific recommendations for the district media director's responsibilities. According to the guide, the purpose of a district level library media program is to promote the effective use of media by students, administrators, and teachers, so that the educational objectives of the school district can be accomplished. Although specific services at the district level will vary with each district, all of the following should be provided:

- developing and coordinating an effective library media program based on the philosophy, goals, and objectives of the school district
- providing leadership for all facets of the media program, including instructional development, instructional technologies such as microcomputers and distance education, media design and production, budgeting, facility development, program planning, and delegation of responsibilities to appropriate personnel
- serving as a member of, or resource person for, the district administrator's governing committees or councils for curriculum and instruction
- coordinating the district library media program with the total district education program and with community information services
- developing, coordinating, and evaluating the district-level long-range plan for library media services
- planning and coordinating ongoing evaluation of the district library media program
- helping to determine staffing needs and to recruit and select building level personnel
- providing, in cooperation with building administrators, guidelines and assistance for a staff evaluation and development program
- coordinating development of a public relations plan designed to inform the educational community and the public of the role of the library media program
- leading development of district policy on compliance with copyright law
- helping to develop library media projects using state or federal funds
- providing liaison for the district with the department's Bureau for Instructional Media and Technology (Hopkins, 1987, p. 20)

The most critical responsibility of the district media director is the development, implementation and continual updating of the district's long range plan for library media services. This plan is required by the administrative rules for Standard (h) and determines the direction of all services at the district and building level. It is the measure of progress for the district's library media program.

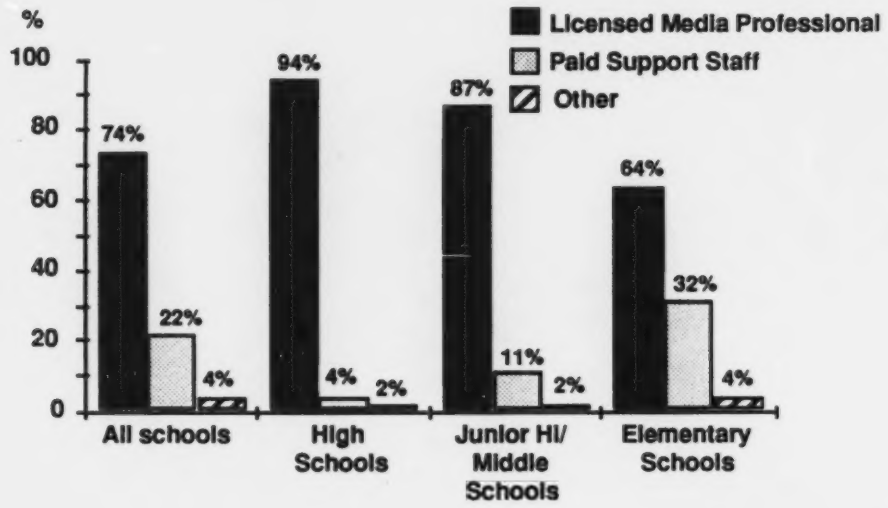
Decisions on whether a district should employ a full-time or part-time district library media director will be based on many variables, including the number of school buildings and library media specialists in the district, the size of the library media program, and the scope of district level responsibilities. The following minimum staffing patterns for district level library media coordination are recommended in *School Library Media Programs*.

- Districts with enrollments below 749 should provide a minimum of one period per school day of release time for district level activities.
- Districts with enrollments between 750 and 1,499 should have a 1/4 time district library media director.
- Districts with enrollments between 1,500 and 2,499 should have a half-time district library media director.
- Districts with enrollments between 2,500 and 2,999 should have the option of employing a full-time or half-time district library media director, depending on the scope of the position.
- Districts with enrollments of 3,000 or more should have a full-time district library media director (Hopkins, 1987, p. 21).

Indicators of Need

Statistics from the library media survey indicate that more library media specialists and support staff are needed to meet state recommended levels. Only 38 percent of all schools with LMCs have full-time library media specialists. Survey data also shows that only 27 percent of the schools with LMCs have the ratio of professional staff to students which is recommended in *School Library Media Programs*. That is, 27 percent of schools with LMCs have a ratio of one professional for every 300-500 students. When we add together professional and support staff, the ratio of total staff to students does not improve. Thirty-one percent of schools with LMCs have a ratio of one staff person for 300-500 students. This indicates that support staff are not being used to increase the staff to student ratio. Nevertheless, because of the shortage of professional staff, in 22 percent of Wisconsin schools, support staff are assigned the major responsibility for day to day operation of the center, as the chart illustrates.

Who is Responsible for Day-to-day Operation of the LMC?

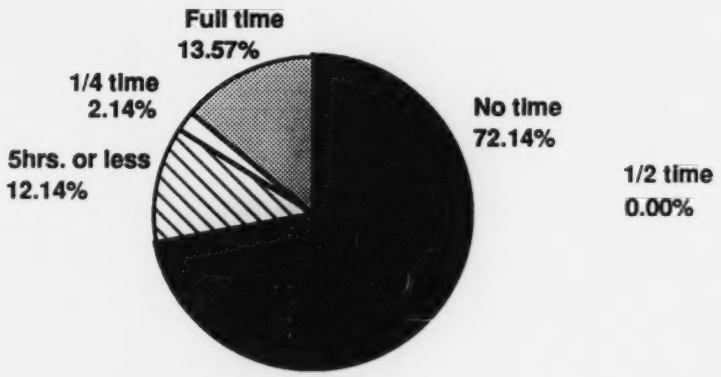


More recent information is available on the status of district media directors. In April, 1990, a survey was sent to a 33 percent random sample of Wisconsin district media directors. This survey collected information about district size and amount of paid time allocated to district media director responsibilities. The results show a lack of adequate time to do the job. Seventy-two percent of the 140 respondents indicate no contract time is provided for district level responsibilities (Lohr, 1990).

Amount of Release Time (Paid) Allocated to District Level Coordination

Enrollment	None	5 hrs. or less	1/4 time	1/2 time	Full-time
Under 750	43	6	1	0	5
750-1499	34	6	2	0	1
1500-2499	15	2	0	0	3
2500-2999	2	2	0	0	3
over 3000	7	1	0	0	7
TOTALS	101	17	3	0	19

District Media Director Release Time 1989-90



While qualified professional and support staff at both the building and district levels are acknowledged to be essential to delivering a full program of library media service ranging from selecting high quality materials to teaching students to become expert users of resources, the number of professional and support staff in library media centers throughout the state's schools falls far below recommended levels.

Recommendations

1. A more comprehensive survey of school districts should be undertaken to determine the responsibilities and time allocated to the district media director role in Wisconsin schools.

2. The bureau should review and revise the information regarding the district media director position in *School Library Media Programs: A Resource and Planning Guide* in light of new technologies and increased responsibilities.

3. The bureau should work with the standards auditors and school districts to raise levels of both professional and support staff to meet the recommended state levels.

4. The state superintendent should endorse the professional and support staffing goals for library media programs recommended in *Information Power*, including

   - a full-time library media specialist in every school, and
   - support staff assigned exclusively to the library media program.

5. The state superintendent should develop proposed legislation mandating

   - as a minimum at least the low range of professional and support staff- to-student ratios recommended for building level library media programs in *School Library Media Programs; A Resource and Planning Guide,* and
   - the minimum staffing patterns for district level library media program direction and coordination recommended in *School Library Media Programs.*

6. Provisional licenses for library media specialists should be discouraged, and creative methods for earning library media licenses should be developed.

7. A library media specialist, employed by the state, should be housed at each CESA as a model to provide leadership for all facets of the library media program, including instructional development, instructional technologies including microcomputers, distance education, media design and production, budgeting, facility development, and program planning.

8. School districts should provide extended contracts of at least two weeks beyond the school year to permit appropriate inventory, acquisition, and maintenance procedures to take place with minimal disruption of services to students and faculty.

9. The bureau should review and revise model job descriptions for library media staff and disseminate these to all school administrators.

Issue 5

Library Media Programs and Technology

Question

What action needs to be taken at the state level to help schools create more productive learning environments through the use of technology and to assure that school library media specialists will provide leadership and expertise in the use of information and instructional technologies?

Background

Effect on Society

Because computers and other electronic technologies are having a revolutionary effect on society, educational needs have changed and will continue to change rapidly. Skills and competencies once deemed essential for success in this society have become far less important; while skills related to electronic technologies have become essential. In general, success in the electronic age will be less dependent on rote memorizing and mechanical skills than on higher-level thinking and creative skills. If schools are to continue to play a major role in providing equal opportunities, they must make significant changes in all curricular areas. This involves creating a more productive learning environment through the use of technology. If school personnel study and carefully consider the potential of electronic technology, they can use it to nurture creative, rather than conforming student behavior.

Range of Technology

Some current uses of computers in education include drill and practice, which has proven to be an effective supplement to traditional classroom instruction; word processing, which has helped ease the burden of writing and revising; simulation exercises, which develop problem solving techniques and higher order thinking skills; database management, which teaches organization and access skills; and computer based graphics, which enable individual artistic expression and promote creativity.

Computers are a general-purpose aid to problem solving. They extend and supplement the capabilities of the human mind. Computers give students a sense of accomplishment, offer instant feedback, eliminate the fear of failure, and allow for increased creativity and experimentation. In addition, they're fun for students to use

on their own. Students can enjoy personal access to technology-enhanced learning environments within the classroom, in the LMC, or at home.

Computers and electronic telecommunications are used not only for instructional purposes, but also as tools to access information and then to analyze, manipulate, and prepare it for presentation. Some applications of computers not limited to instruction include

- opportunities for teachers to communicate and share educational information with colleagues in the same building or across the district, state, and nation;
- access for administrators to fiscal, personnel, and student information;
- access to research data for improvement of curriculum and programs; and
- word processing, spreadsheet, and database programs for general classroom management and correspondence.

However, technology is broader than computers, alone. Satellite, microwave, and fiber optic technologies bring national and international expertise to classrooms in remote locations to make it possible for students at several sites to receive instruction from one teacher or collaborate with each other. Interactive video discs and distance education programs enhance other types of learning, just as books enhance the influence of parents in the home.

Vision of the Future

The long range outlook is for continued rapid improvements in telecommunication systems. The portable cellular phone and laptop computer are examples. Such improvements in communication and information processing will continue in the information age. The future may see education completely individualized to fit the needs of each student. The overall goal is for each student to be socialized and self-actualized for productive and satisfying citizenship. Achievements expected from educational technology include

- development of independent learning skills,
- ability to access data from many sources,
- ability to analyze data from various perspectives,
- ability to combine and process data to produce new information,
- ability to apply information in daily life, and
- motivation to continue learning.

The National Education Association created a Special Committee to review the status of educational technology and concluded that "technological innovation can contribute significantly to the restructuring of our schools and to the enrichment of classroom instruction." They recommended that teachers have the same computer access as other professionals and called on all schools to develop and implement plans that would place a computer with adequate software on the desk of each teacher by 1991 (NEA, 1989, P. 19).

The *Final Report of the ALA Presidential Committee on Information Literacy* acknowledges the important role of school library media centers when it states that "textbooks, workbooks, and lectures must yield to a learning process based on the information resources available for learning and problem solving throughout people's lifetimes--to learning experiences that build a lifelong habit of library use" (ALA, Committee on Information Literacy, 1989, p. 14). The report refers to teachers as coaching and guiding students rather than lecturing. It suggests that teachers recognize that the classroom computer, with access to libraries and databases of the world, is a better source of facts than they could ever hope to be and that librarians should be valued for their information expertise and their technological know-how. The report also says that school library media specialists would "lead frequent in-service teacher workshops and ensure that the school was getting the most out of its investment in information technology" (p. 16).

David Moursund, nationally known computer expert, reaffirms this concept when he says "We must empower teachers by providing them with their own personal computer and a large amount of carefully designed and carefully presented in-service." He also says that we must 'empower' students (Moursund, "A Sneaky Way . . .," 1989, p. 4).

A New Challenge for Schools

In *On Line, Computers in Education: What's Happening? What's Possible?* published by the National School Boards Association, it is stated that "as technology continues to assist in making education cost-effective for nontraditional providers, the schools will face new sources of competition. The challenge for the nation's schools in light of such competition will be to effectively harness the power and advantages which educational technology offers so the schools may continue to deliver instructional services of the highest quality" (National School Boards Association, 1988, p. 39).

In *Power On! New Tools for Teaching and Learning*, published by the Office of Technology Assessment (OTA) of the U.S. Congress, it is stated that near-term effects of performance and productivity of educational technologies may be different from what these technologies might eventually achieve. The OTA finds that the varied capabilities of the technologies are the key to their power and there is no single best use. Therefore, emphasizing a single use technology could stifle innovation, initiative, and experimentation. The OTA concludes that flexibility in the use of technology should be encouraged by different districts (Congress, 1986, p. 9).

Role of the Library Media Program

Since it is responsible for providing the resources that help teachers teach and students learn, for providing access to information itself, and for developing information use skills, the school library media program plays a significant role in assuring that these technologies are in place and that they are used effectively for improving education.

As the information expert, the library media specialist has many opportunities for leadership. According to *Information Power*, "All aspects of education are significantly influenced by major technological advancements. By assuming a leadership role in the use of technology in the school, the library media specialist promotes effective use of instructional technologies and facilitates their full integration into the curriculum" (AASL, 1988, p. 10). To assure that technology is used wisely and effectively, school library media specialists must make informed decisions about appropriate technologies for specific curriculum needs and assume responsibility for educating faculty and students in their optimal use. Therefore, they must possess the expertise necessary to evaluate, select, manage, and use existing and emerging technologies.

To provide adequate resources, school library media specialists must work cooperatively with teachers to ensure that the resources selected meet the specific goals and objectives of the curriculum and the interests of the students and staff. They must also work with administrators to ensure that adequate funding is available for current collections and technology. They must facilitate access to resources outside the school by using telecommunication devices to transmit and retrieve information, by providing online searching by and for students, and by networking with other information agencies.

Indicators of Need

Computers in Instruction

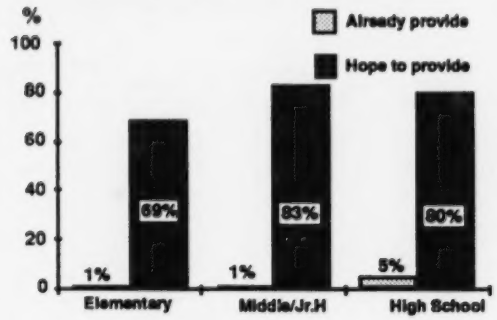
Computers are being used increasingly as tools in many occupations. Over 75 percent of today's jobs require some familiarity with computers, and research released by the Computer Learning Foundation indicates that by the year 2010 virtually all jobs will be computer dependent (Bowman, 1989, p. 1). The emerging high-technology of the information age has been creating a growing gap between technology-rich businesses, industries, and some government agencies on the one hand, and the technology-poor school districts that prepare young people for the job market on the other. The need to prepare all students--not just advanced math and science students--for a future with computers and related technology has been increasing, but schools typically are not equipped to do the job. The Computer Learning Foundation estimates that "on the average, there is only one computer to every 30 students" (p. 1). Wisconsin's ratio is one to every twenty. However, distribution is a problem. There are truly "have" and "have not" districts when it comes to computers available for general instructional programs.

Computers for Information Access

In addition to direct instruction, computers can be used for information retrieval. A few school library media centers are becoming automated, opening the door of con-

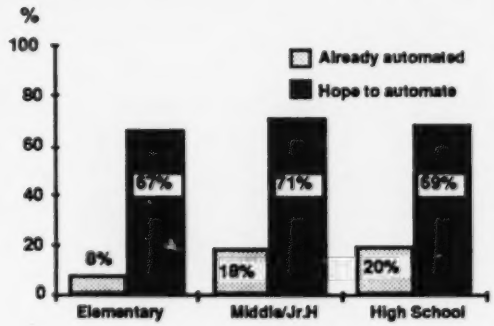
nectivity to world wide resources, and many more schools indicate that library media center automation is high priority. Wisconsin's academic and public libraries are leaders in automation and electronic information retrieval, both within their libraries and from remote sources. All University of Wisconsin campuses are currently automating and some have already eliminated their paper card catalogs. Unfortunately, elementary and secondary schools lag far behind.

Automated Online Catalog



The 1988 Building Level Survey of School Library Media Programs (Sorensen, 1988) showed that only 2 percent of Wisconsin school buildings had an online catalog, while over 23 percent definitely plan to provide one, and another 50 percent hope to provide one. Survey data revealed that of this 73 percent, over 43 percent were elementary school responses.

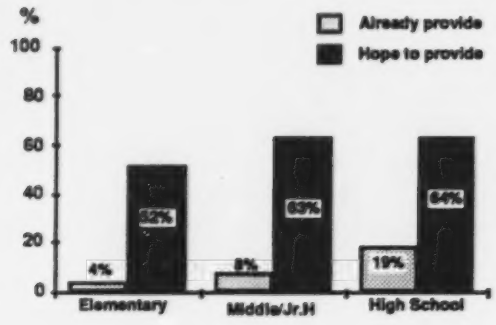
Automated Circulation System



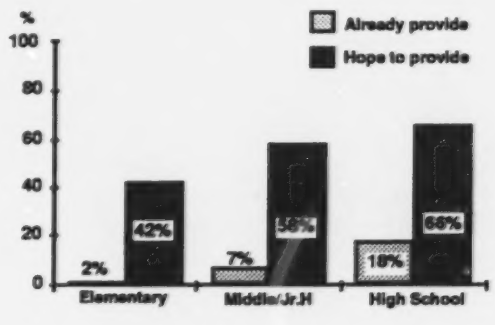
Currently 12 percent of Wisconsin schools provide an automated circulation system. When asked about their priorities for automating the circulation system, 26 percent of the library media specialists said they would definitely provide one, while an additional 42 percent indicated they would like to provide one. Of this 68 percent, over 42 percent were elementary school responses.

Databases have a great deal of information, and the newer electronic media are superior teaching aids. Electronic data storage means that school library media centers can acquire and transmit information electronically as well as store it. However, survey data indicates that only 125 or 8 percent of Wisconsin schools offer database searching for teachers, with 9 percent definitely planning to provide, and 46 percent hoping to provide it in the future. Only 94 or 6 percent of Wisconsin schools currently offer database searching for students, while 9 percent definitely plan to provide it, and an additional 40 percent hope to provide that service for students in the future.

Database Searching for Teachers

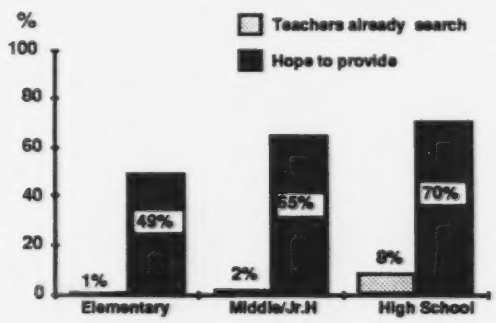


Database Searching for Students

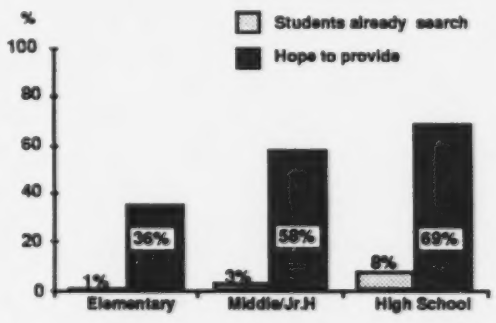


Survey data further reveals that teachers do online searching by themselves in only 13 schools (1 percent of those responding), and search with assistance in only 53 schools. Nine percent of the library media specialists said they definitely plan to help teachers do their own database searching, and an additional 47 percent hope to in the future. Over 32 percent of the respondents who would provide or hope to provide database searching by teachers were from elementary school buildings, and most of the schools that provide any database searching services enroll between 200 and 750 students.

Teachers do Database Searching



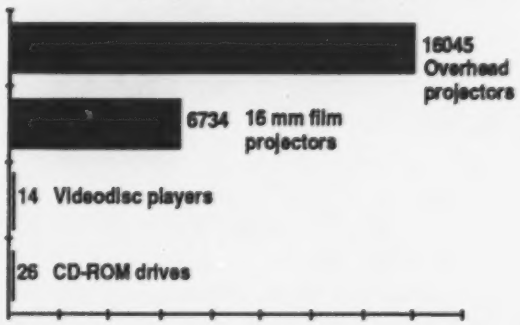
Students do Database Searching



Other Technologies

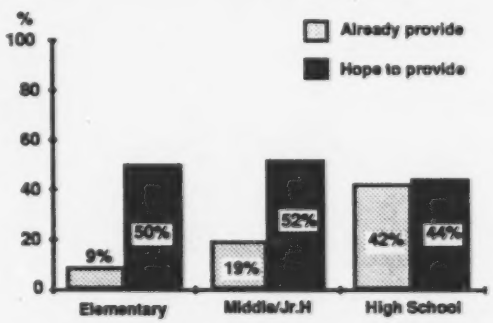
To provide the electronic access to information within and outside the school, there is need for access to and control or distribution of special technologies, such as CD-ROM, optical laser discs, satellite systems, cable television, magnetic storage, and electronic distribution systems. These demand dedicated telephone and data lines for access to information sources and television signals outside the school. Results of the 1988 library media survey show that only a few schools have the new technologies in place, in comparison with traditional audiovisual equipment. Along with the need for these new and emerging technologies, there is a continuing need for conventional audiovisual equipment.

Equipment in schools



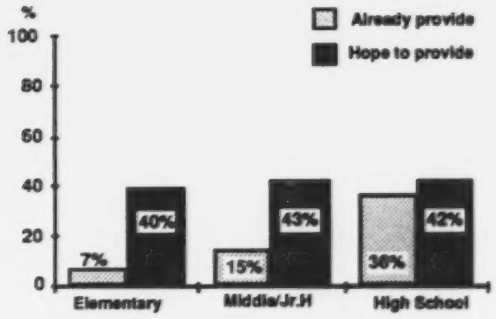
In a letter to the chairman of the Governor's Commission on Schools for the 21st Century, James Klein, President of the Wisconsin Educational Media Association says, "Most of today's homes include more information technology than is found in schools. It is not uncommon for a household to have several videocassette recorders and multiple television receivers, while many classrooms have none and media centers have only a few to share with many teachers. One of the most difficult items to justify in a school budget is a telephone line, and yet this is the 'information highway' of the future" (Klein, 1990, p. 3).

WISCAT use by LMC staff

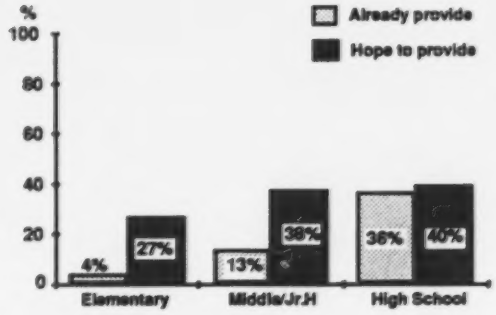


Access to information outside the school includes both borrowing and lending of materials. The statewide bibliographic database, WISCAT, is one of the most effective tools available to facilitate resource sharing. Placing library records in WISCAT is also an extremely helpful first step in automating card catalogs and circulation systems. Yet, the following graphs indicate that relatively few schools make use of this tool.

WISCAT use by teachers



WISCAT use by students

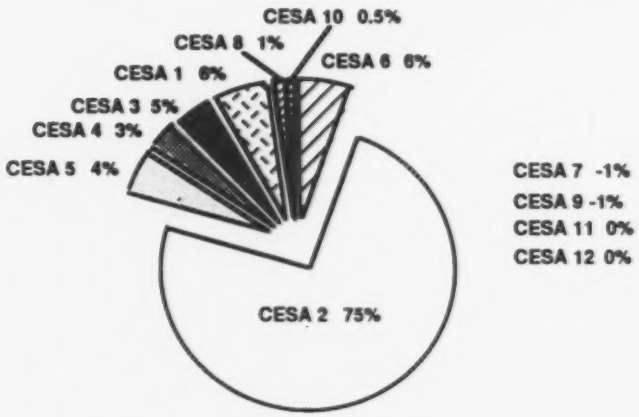


Preview Center Use

The lack of motivation on the part of practicing library media specialists to move to higher technology is itself a problem. The graphs on the preceding pages have shown that not all elementary, middle, and high school library media specialists see the new technologies as a high priority or hope to provide the service. While the department's Microcomputer Center/Library (MCL) is equipped to demonstrate the new technology to all teachers and library media specialists, few have taken advantage of this service, as the chart illustrates.

This chart indicates the CESAs from which educators came to preview instructional software and use the resources in the MCL in Madison during 1989. Three-fourths of the visitors came from CESA 2, where the MCL is located. There were no visitors from CESAs 11 or 12. This would indicate a need to establish similar centers in other parts of the state.

Microcomputer Center/Library visitors by CESA



The many needs related to the issue of technology and the school library media program can be grouped into four categories.

1. Educational Mission

   - the need to prepare all students for a future with computers and other technologies

2. Role of School Library Media Specialists

   - the need for school library media specialists to work cooperatively with teachers to ensure that technological resources relate to specific goals and objectives of the curriculum and the interests of students and staff
   - the need for school library media specialists to work with administrators to ensure that adequate funding is available for current collections and technology
   - the need for school library media specialists to facilitate access to resources outside the school building and district
   - the need for school library media specialists to provide help with online and database searching for teachers and students within and outside the school building and district

3. Access to Information

   - the need for electronic access to information within and outside the school building and district
   - the need for dedicated telephone and data lines to provide access to information sources and television signals outside the school
   - the need for equal access to computer and related technologies and a variety of distance education opportunities
   - the need for participation by schools in resource sharing activities, projects, and networks

4. Opportunities for Staff Development

   - the need for partnerships between DPI, universities and colleges, school districts, CESAs, professional organizations, and industry to provide appropriate education for teachers, library media specialists, administrators, and regional center staff in the use of new and existing technologies
   - the need for regional technology centers similar to the department's Microcomputer Center Library in other parts of the state
   - the need to select, identify, and develop model sites to demonstrate the use of advanced technology in education

Recommendations

1. The department should encourage school districts to include the use of technology within the responsibility of the school library media program and reflect this responsibility in the districts' long range plans for library media services.

2. The department should work with CESAs to provide technology leadership at every CESA comparable to a district media director in a large school district. This would include leadership in

   - instructional computing,
   - library media center operation,
   - distance education,
   - instructional television,
   - curriculum/program development,
   - staff development,
   - cable TV, and
   - new technologies.

3. The state superintendent should request state funding to establish three or four regional technology centers similar to the department's Microcomputer Center Library in other parts of the state, which would demonstrate advanced communication technology. These centers should be developed by the department in cooperation with CESAs, colleges and universities, library systems, local school districts, and private industry. The department would be responsible for facilitating the training of personnel to staff the regional technology centers.

4. The department should work toward establishing partnerships with universities, school districts, CESAs, and industry to train and retrain teachers, school library media specialists, administrators and regional center staff in the use of existing and new technologies. Projects might include

   - a "train the trainer" program offered on an ongoing basis to update CESA or regional personnel and/or district media directors in current technology,
   - a model educational curriculum laboratory in an approved teacher education program that includes leading edge technology equipment and supporting materials for the teacher training program, and
   - a "technology/media world" for educators (teachers/administrators) similar to the department's Administrator Leadership Academy.

5. The department should use the process for approval of teacher education programs to assure that all teachers are instructed in the use of technology in

teaching and learning and that college and university faculty model the effective use of educational technology in their teaching.

6. The state superintendent should request state funding to select and/or develop new and evolving school district demonstration sites that model the use of technology.

7. The state superintendent should request state and national funding to help districts keep current with new and changing technologies.

8. The department should develop a plan for monitoring the increased use of technology by staff and students.

9. The department should continue to pursue the recommendations of the Council on Instructional Telecommunications (CIT) regarding distance education.

10. The department should promote the integration of all aspects of instructional technology into curriculum so that technology serves the educational needs of students and teachers.

11. The department should devise ways to help parents and community members understand how the use of educational technology improves teaching and learning.

12. The bureau should request that the state superintendent expand the role of the Council on Instructional Telecommunications, with a possible name change, to include providing assistance to school districts in using and applying all new technology to meet the educational needs of students.

13. The department should provide additional opportunities for schools to become aware of potential educational uses of cable television.

14. The bureau should develop a formula to help districts plan the budgeting necessary for a cost effective transition from a manual catalog and circulation system to automated systems.

Issue 6

Library Media Facilities

Question

What is needed to ensure that a library media center (LMC) of appropriate size and design is available in each of Wisconsin's public elementary and secondary schools?

Background

Educators have described the LMC as the "center of learning" because of the variety of resources it makes available and the many kinds of learning activities it supports. Because these resources and activities have certain space and design requirements, the size, shape, and location of the LMC are important to accomplishing educational objectives. Both access to the resources and the quality of their use are affected by these factors.

Furthermore, the instructional area most rapidly outgrown by changes in information technology and the educational program is the library media center. Computers and modems have enabled libraries to gain access to information stored outside the school. CD-ROM devices and videodiscs bring volumes of data and highly effective audiovisual presentations to a single computer work station. Online catalogs provide far better access to the collection than card catalogs, and automated circulation systems are much faster and more accurate than their manual predecessors.

Our schools should make the best learning tools available for students and teachers and should house them in an environment that is conducive to learning, safe, secure, aesthetically pleasing, and accessible. *Information Power: Guidelines for School Library Media Programs* states, "The arrangement of facilities should create an environment that encourages the use of various media, facilitates inquiry, helps motivate students to use the materials and services necessary for learning, and provides the design flexibility needed to accomodate new technologies" (AASL, 1988, p. 87).

However, the library media centers in most Wisconsin schools fall far short of creating such an environment for learning. Many are just too small. Elementary schools often use a large (e.g., 1000 sq. ft.) classroom for the school library. The problem with a room that size is that it does not allow for a functional design. Tables and chairs are clustered in the middle, wall-mounted stacks surround the room, and the charging desk is near the door. In this arrangement, browsing and circulation inter-

fere with study, quiet reflection is nearly impossible, distractions spread easily, and students are tempted to take materials without checking them out because bookshelves are far from the circulation desk. Electrical power is seldom adequate and properly located to permit use of basic audiovisual materials, much less computers and other electronic technology, and there is usually no room to process materials or to store equipment or back issues of periodicals. Audiovisual materials and multimedia kits are usually kept in a storeroom or otherwise out of sight. Even an area the size of two classrooms can do little more than house the materials somewhat better and provide more space between materials and students.

School Library Media Programs: A Resource and Planning Guide has a fairly complex formula for determining the size of a library media center. In most cases the basics come down to a combination of

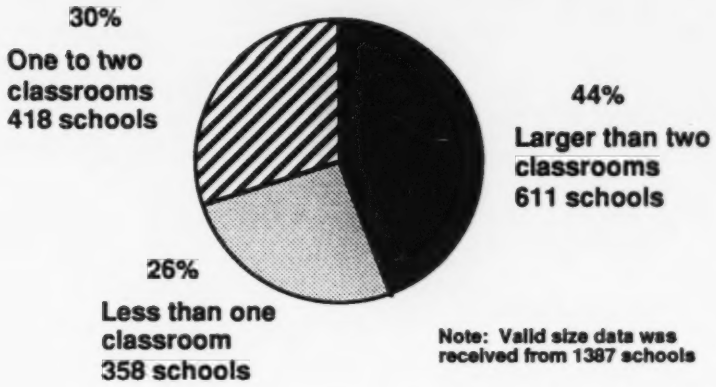
- a reading, listening, and viewing area whose size amounts to the enrollment capacity of the building times 6 square feet, and
- other areas for storage, group work, office, production, processing, etc. that usually add up to another four square feet per student.

Therefore, intended enrollment capacity times ten is a reliable rule of thumb for the recommended square footage of the total library media complex (Hopkins, 1987, p. 73).

Indicators of Need

A library media center the size of a single classroom is inadequate, but all too common. The 1988 Survey of School Library Media Services in Wisconsin (Sorensen, 1988) shows that of the schools with LMCs (5 percent have no LMC at all), 358 or 26 percent have LMCs that total less than 1000 square feet. This includes the area for reading, listening, and viewing plus space for materials, equipment, processing, storage, and for supporting a very limited range of learning activities. And 36 percent of these 358 schools have enrollments over 300. Fifty-six percent of the LMCs (776) are smaller than a double classroom. Only 14 percent of Wisconsin LMCs meet the recommended square footage of 10 sq. ft. per student.

Size of Library Media Centers


30%
One to two classrooms 418 schools
44%
Larger than two classrooms 611 schools
26%
Less than one classroom 358 schools
Note: Valid size data was received from 1387 schools

Seating capacity is another useful measure of adequacy. While only 133 LMCs or 10 percent seat no more than 20 students, 381 or 27 percent seat fewer than 30, and 53 of these are in schools with enrollments over 400. Only 774 LMCs statewide or 56 percent seat more than 50 students, or approximately two class-size groups.

Only 346 schools or 25 percent have small group workrooms in their LMCs, and only 270 or 19 percent have an area for media production. Just over half can store back issues of periodicals properly, and one third have a teacher center or professional library. In only 1/3 of our schools can video programming be transmitted throughout the building. The library media specialists in 661 or 37 percent of the schools report that access to electrical power is less than adequate.

It is not surprising that the same survey shows little production of audiovisual materials and little integration of printed and audiovisual materials and therefore limited access to the audiovisual materials. Students are helped to produce audiovisual materials routinely in only 234 or 13 percent of the schools. AV production is routinely coordinated through the LMC in only 342 or 19 percent of the schools. All print and audiovisual media are immediately accessible on open shelves in only 361 or 20 percent of the schools.

Although massive amounts of information are available in electronic databases, this information is unavailable to schools that do not have a telephone. Less than 1/2 of our library media centers have a telephone, and only 31 percent have long distance telephone lines. Lack of a telephone also inhibits borrowing of materials from other schools or libraries.

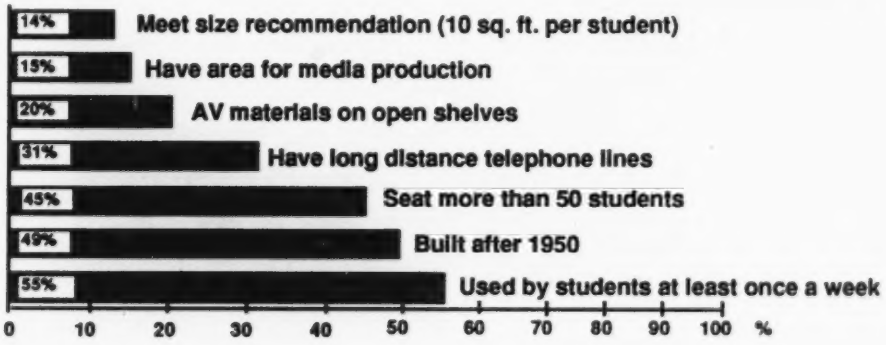
The age of a building often determines the ease with which it can be equipped for the use of modern technology. Telephone technicians report great difficulty (and hence high cost) in wiring old masonry and concrete buildings. The Department of

Industry, Labor, and Human Relations reports that 25 percent of our schools were built prior to 1930, and that 16 percent were built between 1930 and 1950. Large open spans are best for library media centers because they permit the internal space to be altered and reconfigured. The older the building, the less likely it is to have this type of space. Old buildings also are less likely to be built on one level or have elevators to facilitate movement of equipment and provide good access for handicapped users.

Information Power says, "The library media center should be near the classrooms and easily accessible to students and teachers throughout the school day. Locating the center close to study areas facilitates frequent use and minimizes time lost in transit. When the auditorium, theater, and large group areas are nearby and easily accessible, projection and recording equipment can be moved in and out quickly and efficiently" (AASL, 1988, p. 89). However, third floor locations or locations away from these other areas are common for library media centers in older buildings.

Many of Wisconsin's school library media centers are too small, poorly located, or inadequately equipped to take advantage of today's information technology. However, use is high. In 990 schools (55 percent), library media specialists report that 90 percent or more of the students use the LMC at least once a week. It is evident that improvements made in school library media centers would affect a very large percentage of Wisconsin's learners.

Features of Wisconsin School Library Media Centers


14% Meet size recommendation (10 sq. ft. per student)
15% Have area for media production
20% AV materials on open shelves
31% Have long distance telephone lines
45% Seat more than 50 students
49% Built after 1950
55% Used by students at least once a week
0 10 20 30 40 50 60 70 80 90 100 %

Recommendations

1. The state superintendent should develop rules requiring adequate library media facilities in the design of all new or remodeled school buildings.

2. Bureau staff should work with the department's school facilities consultant and architects to develop and present regional workshops for architects and school administrators at all levels to

   - clarify the appropriate role of the library media center in supporting teaching and learning, and
   - teach principles of design for library media centers that will ensure sufficient space, accessibility, aesthetic excellence, safety, security for materials, accomodation of new technology, and future adaptability.

3. Bureau staff should work with regional library media agencies (e.g., CESAs and library systems) to develop informed and capable staff who can help school district personnel find information/assistance in planning new library media centers or improving existing ones.

4. Bureau staff should work with professional associations to develop informational materials, perhaps including a video component, and a series of workshops for library media staff and other school personnel on planning appropriate facilities for school library media programs.

5. Bureau staff should identify model designs and visitation sites to help planners visualize good designs for library media centers.

6. In the review of teacher education programs, department staff should ensure that library media education programs include design of library media centers in the required coursework for the initial license.

Issue 7

Library Media Collections and Resources

Question

What steps are necessary to ensure that all students attending Wisconsin public schools have access to educational resources that adequately support their learning needs and that all teachers have access to resources that adequately support their teaching responsibilities?

Background

The determination of adequate resources for student and teacher needs is a complex process. The easiest measure to use is a ratio of numbers of items in a collection to numbers of students and teachers. However, adequacy must also be measured in many other ways. Each of the following is an issue:

- quality and adequacy of the building level collection
- access to resources outside the school, including electronic sources
- physical access to the collection
- intellectual access to the collection

Quality and Adequacy of the Collection

Quality of the collection is best assured through the development, adoption, implementation and continued revision of a good selection policy. In Wisconsin every school district is required by s. 118.13 of Wisconsin Statutes and PI 9 of the Wisconsin Administrative Code to have an instructional materials selection policy which is adopted by the school board. In addition, s. 121.02 (1)(h), commonly known as Standard (h), requires that "The school board shall provide adequate instructional materials, texts, and library services which reflect the cultural diversity and pluralistic nature of American society." A good selection policy will incorporate the principles of Standard (h) and include criteria for materials selection, a procedure for reconsideration of materials, and a policy for continual maintenance (weeding) of the collection. It will also provide for active participation by teachers in reviewing materials and recommending titles for purchase.

The adequacy of the collection will also require

- materials that span all ability levels,
- a variety of media to accommodate different learning styles,
- a collection large enough to support ongoing curricular needs, and
- access to information and resources outside the school.

While neither state nor national guidelines recommend specific sizes for LMC collections, *Information Power: Guidelines for School Library Media Programs* provides some statistics on size of collections in LMCs judged to provide high service library media programs (AASL, 1988, pp. 117-123). This information may be helpful in determining adequacy.

Access to Outside Resources

Access to resources outside the school is of major importance today. There are resources which are important for K-12 schools but are either too expensive or used too infrequently to be purchased by individual schools. This is particularly true of teacher inservice materials and some types of nonprint materials. While it is often possible to obtain materials from other libraries through interlibrary loan, in Wisconsin no agency is charged with the responsibility of developing collections of such materials.

Online databases also provide access to resources outside the school. Students in schools that provide online searching services through a telephone connection to these databases have information from around the world at their fingertips. New technology is providing increased resources in other ways as well. CD-ROM products can bring both text and video information into libraries without the use of telephone lines. Broadcast television and satellite delivery make it possible for national or international experts to address students and teachers across the nation. All these resources should be considered and included when a school library media center writes its collection development plan.

Physical Access

Physical access to the collection means that students and teachers should be able to use the collection when they need it. In order for this to be true

- the collection should be in a central library media center rather than scattered throughout the building in classroom collections,
- the library media center should be open before and after school as well as throughout the school day,
- the library media center and its materials should be accessible to everyone regardless of physical handicap,
- use of the library media center should not be scheduled in such a way

that classes or individuals must wait until their scheduled time to use the LMC,
- there must be sufficient equipment to allow use of all forms of media as needed, and
- appropriate circulation policies should facilitate extended loans of mini-collections or equipment to classrooms when appropriate.

While resource based teaching is an excellent and educationally sound concept, it carries with it a potential problem for access to resources. As more curricular areas use trade books for instruction, there is a strong temptation to recreate permanent classroom collections. A small classroom collection can never hope to accommodate the wide range of ability levels and interests represented in that classroom. It is imperative that library media specialists work with classroom teachers to foster resource based teaching, but emphasize the importance of a strong central collection and avoid the creation of permanent classroom collections which will ultimately decrease maximum access.

Intellectual Access

Intellectual access to the collection means that users can easily locate and use the items or information that they need. For this to be accomplished

- all items in the collection should be indexed according to a standard cataloging and classification system,
- all items in the collection should be available on open shelving without restrictive labeling,
- a wide variety of materials must be available suitable to the interests and abilities of the users,
- students must possess the skills required to use resources in a meaningful way,
- the privacy rights of users must be respected, and
- sufficient professional and support staff must be present so that students receive help when it is needed.

Indicators of Need

Quality and Adequacy of the Collection

A good selection policy is the most important foundation for a quality library media collection. When school districts are audited for compliance with the 20 educational standards, the existence of a selection policy is determined, but the currency or quality of the policy is not necessarily monitored. It is the observation of the bureau staff and of those who audit compliance with Standard (h) that many selection policies need revision.

While size of the collection is neither the best nor the only indicator of adequacy (because quality, currency, and relevance to curriculum are just as important); nevertheless, it is significant. Ten thousand volumes is often used as a benchmark. The tables in *Information Power*, for example, indicate that, with one exception, the top 25 percent of the schools with high service programs all have more than 10,000 books. The one exception is for elementary schools with fewer than 500 students, where the top 25 percent average 9,227 books (AASL, 1988, p. 117). The 1988 Building Level Survey of School Library Media Services (Sorensen, 1988) shows that only 657 or 37 percent of all Wisconsin schools have more than 10,000 books. Nearly a fourth have fewer than 4,000 volumes. While the smallest collections are typically in small enrollment schools, there are some exceptions. For example, seven of the schools with fewer than 4,000 volumes have enrollments over 750. At the positive end, six schools with enrollments under 300 have more than 15,000 volumes.

Access to Outside Resources

Some regional agencies, such as CESAs and public library systems, voluntarily develop collections of materials to supplement school library media collections. Most of the CESAs have done so, but the size and depth of collections vary. The department's Microcomputer Center/Library and the Reference and Loan Library include some of these items in their collections, as do university libraries-- particularly those with teacher education programs. A major problem for schools is that none of these libraries except those in the CESAs can schedule use of materials in advance, yet confirmed scheduling is necessary for both curricular and inservice purposes. This is reflective of the fact that no agencies except CESAs see service to K-12 schools as part of their primary mission.

Interlibrary loan among all types of libraries has increased significantly in Wisconsin in recent years, particularly since the development of WISCAT, a union catalog of library holdings in the state. Three-hundred-fifty schools have listed their holdings in WISCAT, thus bringing schools into greater participation in the interlibrary loan system. According to a statewide study of interlibrary loan patterns, 93,000 items were requested by school library media centers in 1988 (Griffiths, 1988, p. 4). There is further evidence of wide participation in interlibrary loan by schools. The 1988 library media survey reveals that 69 percent of all schools report that they either occasionally or routinely provide interlibrary loan for teachers or students, with an even higher percentage of high schools (83 percent) reporting this level of service.

Although the majority of school districts make use of interlibrary loan, few schools provide access to electronic information in the form of online databases. Ninety-four percent of all schools reported that neither students nor teachers did online searching in the LMC. Only 25 districts contract for database searching by department staff. In addition, three CESAs provide database searching for their schools. When asked if database searching would be provided in the future, 34.7 percent indicated it is not a priority, 35.6 percent hope to provide it, and 20 percent

definitely plan to provide it.

Physical Access

Statistics from the library media survey help to portray the physical access to collections. Wisconsin has done quite well in consolidating classroom collections and creating library media centers in schools. Only 100 schools report the lack of a centralized library media center.

Another way to measure physical access is to measure hours the LMC is open. While only 5 percent of the LMCs are open less than half of the school day, in nearly 40 percent of Wisconsin's schools the LMCs are open but unstaffed during part of the day. In the majority of cases this is less than two hours a day.

Hours Open Per Day	Percent of Schools
1-4 hours per day	5.0%
4-6 hours per day	8.0%
6-7.5 hours per day	37.0%
7-8 hours per day	36.5%
8-9 hours per day	12.0%

The most restrictive factor found in the hours of access is that 68.5 percent of elementary LMCs have required weekly class use and 33.6 percent of high schools use the LMC as a scheduled study hall. Further details are provided in Issue 2. This type of scheduling limits the free use of the LMC at the time of need.

Most schools have purchased filmstrips, audio and video recordings, and other audiovisual media over the years and have housed them in the LMC to promote use. However, sometimes the LMC does not have basic listening and viewing equipment, or there is not enough instructional equipment to support classroom teaching. The library media survey indicates that some basic pieces of equipment are still not owned at all by some schools. The table below shows how many schools own **none** of the following items:

Equipment Lacking	Percent of Schools
overhead projectors	4%
16mm projectors	3%
slide projectors	11%
filmstrip viewers	12%
sound filmstrip projectors	25%

A total of 5879 VHS videocassette recorders or players are owned by reporting schools. This averages 3.38 per school. The ability of teachers to use video tapes eas-

ily and at critical points in the curriculum is especially important, given the video resources available today; but many classrooms are without ready access to needed hardware. The library media survey showed that the newest types of equipment such as computer display projectors, CD-ROM players, interactive videodisc players, satellite dishes, and/or ITFS (Instructional Telecommunications Fixed Service) equipment are present in only a few Wisconsin schools.

Intellectual Access

Not all Wisconsin schools list audiovisual materials in the LMC catalog and place them on open shelves. The 1988 survey shows the following:

Items Cataloged	Percent of Schools
all media	63.0%
some media	33.6%

Items on Open Shelves	Percent of Schools
books only	21.0%
all printed media	39.0%
all print and some nonprint	16.0%
all media	20.0%

Library skills instruction takes place in most schools, but 12.5 percent of the schools report that there is no sequential program of library skills instruction.

It is inevitable that inadequate staffing will have a negative effect on the intellectual access of students to the collection. Professional staff ratios in Wisconsin schools do not meet the recommendations found in *School Library Media Programs: A Resource and Planning Guide*. The guide recommends that there be a minimum of one professional staff person for every 300-500 students (Hopkins, 1987, p. 7). The library media survey shows that only 27 percent of Wisconsin schools meet this minimum recommendation. The table below shows the percent of schools meeting this minimum, by level.

School Level	Percent with 1:300-500 Ratio
K-12 (in one building)	47.8%
elementary schools	2.0%
junior high/middle schools	34.0%
high schools	20.0%

While 95 percent of Wisconsin schools have collected their instructional materials into a central library media center, the quality, currency, relevance, and scope of these collections vary. In addition, direct student access to audiovisual materials is

quite limited in many schools and impossible in some. The new electronic media are just beginning to appear in LMCs. The practice of sharing professional library media staff among two or more buildings and not providing sufficient support staff limits students' and teachers' contact with the information specialists, and therefore reduces the effectiveness and efficiency of the overall teaching and learning process in many Wisconsin schools.

Recommendations

1. Bureau staff should continue to work with the standards auditors to help them identify weak selection policies and inadequate or aging collections, and should work with these districts to develop adequate collections.

2. The department's brochure on intellectual freedom should be distributed to every library media specialist and district administrator in Wisconsin.

3. The department should develop an administrative rule stating that the Common School Fund cannot be used to purchase materials for classroom collections.

4. Schools should be encouraged to participate in resource sharing and to join multitype library systems, when they are developed.

5. A network of school library media specialists and all other library media specialists should be developed to train school library media specialists to use online searching and electronic bulletin boards with faculty and students.

6. The administrative rule stating that "All students be provided access to a current, balanced collection...." should be interpreted to mean that the collection of resources must be available in a library media center that is appropriately staffed and accessible throughout the day in every school building.

7. A survey should be planned and conducted which will identify resources that are needed by K-12 schools, but are not appropriate for building level collections and are not available from other collections in the state. If it is shown that there is a resource gap, a plan should be developed to meet that need.

8. New guidelines should be developed that specify the types and amount of equipment necessary for effective use of all types of media. These should be developed cooperatively by the department and professional associations.

9. The bureau should arrange for research to be conducted to assess the level of library/information skills attained by students in Wisconsin schools. This could be pursued in cooperation with university faculty, national associations, or other professional groups.

Issue 8

Library Media Financing and Budgeting

Question

How can library media programs be funded adequately to meet educational program goals?

Background

Two major developments impact upon the discussion of financing and budgeting for school library media programs and centers. One is the explosion in information and information technologies; the other is in the new role library media specialists play in curriculum and instruction. Both developments have an impact on the amount of funds needed to staff and equip school library media centers.

Information and Information Technology Explosion

The amount of information is expanding at an unprecedented rate and the technologies that store, organize, and connect us to this growing body of information are affecting every aspect of our lives. It is estimated that the world's store of knowledge has doubled and doubled again during the 20th century (Cornish, 1986, p. 14) and that, given this rate, the volume of knowledge is increasing so rapidly that it is impossible to keep pace with this expansion (Kirschenbaum , 1971, p. 267).

In an attempt to cope with this expansion, and to store and provide access to the information, a multitude of new technologies has evolved. These are described fully in Issues 1 and 5. "Electronic publishing" is beginning to replace the printed word. Some reference tools used in college and university libraries are no longer available in printed form, but many traditional library materials remain. The cost of keeping up with these developments has increased dramatically because of the need to acquire and maintain the new technological tools of the information age and the software that runs them, while at the same time keeping up with the ongoing purchase of printed and audiovisual materials and the equipment associated with them.

New Role for the Library Media Specialist

The proliferation of information resources, the growing need for information and learning skills, and the development of new technologies have broadened and redefined the mission of the school library media program and the role of the school library media specialist. This explosion of information and the technologies that make it accessible have introduced a new concept into the curriculum: information literacy. Information literacy is a survival skill in the information age. Instead of being overwhelmed by the abundance of information resources available, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information (ALA, Committee on Information Literacy, 1989, p. 2).

The library media specialist, as the information expert, has the responsibility not only to use his or her special knowledge to gain access to all this information but also to impart this knowledge to students and faculty. These multiple responsibilities inevitably create a demand for additional professional and support staff, a demand that will have a major impact on the financing of school library media centers. The size of the impact is directly related to the number of professional and support personnel needed to fully staff all existing school library media centers. Staffing recommendations are found in Issue 4.

Indicators of Need

The Cost of Information and Technology

The following table illustrates the actual amounts of money spent by school library media centers throughout Wisconsin over a recent seven year period to replace current technologies while also purchasing new and emerging technologies. The figures contained in this table come from the equipment addition (551) and equipment replacement (561) object codes within the school library function code (222 200) of the Wisconsin Elementary and Secondary School Accounting System (WESSAS).

Expenditures for Equipment for School Library Media Programs

Year	Equipment Addition	Equipment Replacement	Total	% Change
1981-82	$1,158,426	$540,952	$1,699,378	--
1982-83	2,023,851	676,017	2,699,868	+58.9
1983-84	2,535,798	908,566	3,432,364	+21.3
1984-85	2,744,813	985,678	3,730,491	+ 8.0
1985-86	3,103,575	1,053,383	4,156,958	+10.3
1986-87	2,953,031	1,106,788	4,059,819	- 2.4
1987-88	3,422,554	1,207,677	4,630,231	+12.3

This table clearly illustrates that school library media centers have been spending between two and three times more money for acquiring new equipment than they have for replacing old equipment and that the amount spent on just these two object codes has increased rather dramatically in all but one of the years represented. These object codes do not cover the increasing cost of repair and maintenance, which must be taken from other budget line items, further eroding the amount the library media center has to spend on other activities.

The equipment to which these figures relate ranges from microcomputers, modems, and CD-ROM players to laser videodisc players, audiovisual production equipment, and television satellite dishes. Wisconsin's participation in the Satellite Educational Resource Consortium (SERC) illustrates the state's commitment to using telecommunications for credit courses, curriculum enrichment, and staff development programs in the future.

Each of these technology platforms adds to the cost of running the modern library media center. A microcomputer fitted with a modem, CD-ROM or laser disc player, and a few program discs will cost approximately $3,000. A microcomputer with circulation and catalog software will cost between $4,000 and $10,000, depending on the size of the collection, and whether or not it is networked with other classrooms or buildings. Audiovisual equipment is difficult to estimate but could easily cost $2,000-$5,000 for a basic set of listening and viewing equipment. Satellite dishes and their attendant equipment cost between $3,000 and $10,000. None of these costs includes audiovisual materials, maintenance, upkeep, supplies, or teleconference fees that pay for programs received via satellite.

In addition to the escalating costs for equipment, the cost of print based material is also increasing. In an April, 1990 article Richard Sorensen quotes figures that indicate that the average book price has increased in 1989 from between 5 and 10 percent over the previous year's price. Between 1977 and 1987, elementary school hardcover book prices rose 75 percent, paperbacks 98 percent, secondary hardcover school books 96 percent, and secondary level paperbacks 132 percent. Increases in the cost of periodicals and audiovisual materials were even higher during those years. However, in 1987, this state's public schools were spending only 33 percent more for library materials than they did in 1977. There has obviously been a loss in quantity of printed materials available to students and teachers due to inflation ("Plan . . .," 1990, p. 3).

Cost of the New Role for Library Media Specialists

The earlier discussion of the Library Media Specialist As Curriculum Partner illustrates how this role has been evolving into a new synthesis of library/media and curriculum/instruction activities. The role has changed from one of keeper of a warehouse of books and materials which served as an adjunct to the classroom, to one of manager of a place where books and a variety of audiovisual materials could

be used as well as produced, and now to an expectation that the library media specialist will be fully involved in the teaching/learning process. *Information Power: Guidelines for School Library Media Programs* envisions that "skills, knowledge, and attitudes concerning information access, use, and communication are an integral part of the school curriculum" (AASL, 1988, pp. 31-32). Library media specialists are expected to work with teachers, media resource people, and others in their communities to ensure that students, teachers, and community members are able to locate, evaluate, and effectively use information for any given need (ALA, Committee on Information Literacy, p. 14). As the discussion in Issue 4 points out, this role change creates a greater demand for staff in the library media program.

However, evidence from the 1988 Building Level Survey of Library Media Programs (Sorensen, 1988) indicates a lack of qualified library media specialists in school districts. The statistics cited in Issue 4 show that only 38 percent of all buildings with library media centers have one full-time professional. Additional data indicates that support staff are not being used to increase the library media center ratio of staff to pupils.

Sources of Financing School Library Media Centers

School library media centers are financed using local, state and federal monies. These various funding sources have increased or decreased their role in financing school library media centers over the last two decades.

Use of local funds for library materials has decreased rapidly since 1971. Appendixes C and D illustrate the full extent of this reduction. In 1977, for example, the average local school district contribution was $7.11 per pupil. Ten years later this local contribution was $1.25 per pupil. The replacement for these local monies and the major source of all monies for school library media center materials is the state level funding source called the Common School Fund.

This fund was created in Article X, Section 2, of the State Constitution. It has grown to just under $200 million. During 1989 it generated $13,433,549 in interest, which was distributed to school districts in January 1990. The interest from this fund is allocated annually to the public schools based on the number of children between the ages of four and twenty residing in the school district according to the school census. While the amount per "census child" was $10.42 in 1989, the average amount allocated per enrolled student was $15.68. In 1990 the average amount allocated per enrolled student in Wisconsin public schools was $17.99. These allocations are to be spent on library books, audiovisual materials, newspapers, periodicals, programmed microcomputer software, microfilm, and reference books for school library media programs ("Aids . . .," 1990, p. 16).

The federal Chapter II program (of the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988) is an attempt to streamline the funding of what used to be approximately 30 categorical aid programs into one source. This funding source has been relatively stable although it has lost approximately 8 percent of its funding level in the last three years due to the Gramm-Rudman Act. In 1990 the Chapter II rules focus the funding for local districts on the following six categories:

1. programs to meet the educational needs of at-risk and drop out students

2. programs for the acquisition and use of instructional and educational materials, including library books, reference materials, computer software and hardware for instructional use, and other curricular materials that would be used to improve the quality of instruction

3. innovative programs addressing schoolwide improvements

4. training and development programs to enhance the knowledge and skills of teachers, librarians, school counselors and other pupil services personnel, administrators, and school board members

5. programs designed to enhance the personal excellence of students and student achievement

6. other innovative projects which would enhance the educational program and climate of the schools, including programs for gifted and talented, technology education, early childhood, community education and youth suicide prevention programs

Three of these categories directly affect the school library media setting: category two in a major way, categories four and six in other ways.

Every district is eligible to receive Chapter II funds. Eighty percent of the funds allocated to the state go to local school districts. Half of that is distributed on a simple per-pupil basis. The rest is allocated through formulas designed to benefit districts with many students from economically disadvantaged families and districts in sparsely populated regions of the state.

Chapter II is a mixed bag for school library media centers. On the positive side, Appendix E documents that almost 41 percent of all Chapter II money was spent for instructional and curricular materials. This is by far the most prevalent use of these funds. On the other hand, the rules do not stipulate that these materials must reside in the school library media center, leaving it up to the discretion of the local school advisory committee to determine what is to be purchased and where these materials are to be housed. It is imperative that district and school library media specialists

work closely with local Chapter II committees to ensure that all options for the use of these funds are explored, including the possibility of housing appropriate materials in the library media center.

Library media programs are at a crossroads. The explosion in information and information technologies and the new role library media specialists play in curriculum and instruction has put pressure on local school districts to adequately staff and equip their library media centers. No special funding programs are available to help school districts pay for personnel to provide increased library media services. With the majority of funds for materials coming from the Common School Fund and Chapter II, it is important that money is used to meet the highest local priorities and that these funding programs remain stable sources of funding.

Recommendations

1. The department should study the basic level of funding necessary for a school library media program, taking into consideration the services to be provided, and develop an appropriate formula.

2. District and school library media specialists, should work closely with their local Chapter II committees to ensure that all options for the use of these funds are explored, including the possibility of housing appropriate materials in the library media center.

3. The bureau should develop specific models for district use of Chapter II money for library media programs, including instructional technology.

4. The bureau should develop specific guidelines for district media directors to use in monitoring the expenditure of Common School Fund money.

5. The department should develop a formula to help districts plan the funding level necessary for a cost effective transition from a manual catalog and circulation system to automated systems.

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Guidelines for Personnel (Appendix A)

1. Each school, regardless of size or level, has at least one full-time library media specialist who serves full-time as the head of the library media program within the building.

2. Library media specialists are members of the school's instructional staff and participate fully in the planning, delivery, and evaluation of the school curriculum and of student learning activities.

3. Library media specialists have master's level education with preparation in library and information science, management, education, media, communications theory, and technology.

4. The library media staff includes one or more paid technicians, assistants, or clerks for each library media professional.

5. The number of professional staff needed in any building is determined through an identified planning process, which takes into account program requirements, the number of students and teachers who are served, and other pertinent features of the school and the library media center itself.

6. Library media personnel are available to teachers and students throughout the school day and do not have their time rigidly scheduled with classes.

7. Library media specialists are evaluated at the building level through instruments which address their unique responsibilities and contributions according to established district practices for all professional personnel.

8. Library media staff members have salary, fringe benefits, and working conditions equal to those of other staff members with comparable qualifications and responsibilities.

9. The head of the library media program is accorded pay, responsibilities, and administrative standing commensurate with other leadership positions in the school and serves on the school's curriculum or instructional body.

10. Library media specialists engage in continuing education activities to ensure that they are qualified to deliver library media programs that reflect the most recent developments in education, technology, and information science.

11. Leadership and coordination are provided at the district level by a library media specialist chosen on the basis of educational preparation, breadth of experience, and administrative qualifications.

(AASL, 1988, p. 66-67)

Appendix B

Staffing Ranges Based on Program Philosophy	
Less Staff Needed	**More Staff Needed**
Emphasis on library media center as a self-service center	Emphasis on a wide range of learning activities to be carried out both independently and with professional leadership
Materials selected from standard sources and recommended lists primarily by library media specialists	Specialized selection of materials tied to meeting instructional objectives in consultation with teaching staff
Little access to materials outside building	Strong emphasis on making resources outside building available to teachers and students, particularly resources available on interlibrary loan or electronic data bases
Minimal library media skills program	Integrated planning and teaching of a comprehensive range of library media skills in conjunction with the instructional curriculum
Minimal involvement of library media specialist in the instructional program	Strong involvement of library media specialist in instructional program, including curriculum planning, faculty inservice, education, and joint planning and evaluation of library media program
Little or no design and production of AV materials	Design and production of AV materials suited to specific instructional objectives
Use of library media center limited to scheduled class sessions	Use of library media center open; varies depending on needs of classroom, group, and individual users; unlimited student access throughout the day

Recommended Staffing Patterns				
Size of School		**Size of Library Media Program Staff**		
Enrollment	**Number of Teachers**	**Professional Staff**	**Support Staff**	**Total Staff**
Up to 249	Up to 15	0.5–1.0	1.0–2.0	1.5–3.0
250–499	10–30	1.0–1.5	1.0–2.5	2.0–4.0
500–749	20–45	1.0–2.0	2.0–3.0	3.0–5.0
750–999	30–60	1.5–2.5	2.0–3.5	3.5–6.0
1000–1249	40–75	2.0–3.0	2.5–4.0	4.5–7.0
1250– 1499	50–90	2.5–3.5	3.0-4.5	5.5–8.0
1500–1749	60–105	3.0–4.0	3.5–5.0	6.5–9.0
1750+	70+	Additional 0.5 professional and 0.5 support staff recommended for each additional 250–500 students.		

The numbers of professional and support staff must be carefully balanced to assure maximum efficiency and effectiveness. Professional staff can be most productive when supported by adequate clerical and technical staff. One support person for each professional is recommended.

It is highly recommended that there be a full-time library media specialist in each school, so that a program which makes instructional use of the media center throughout the day may be developed.

Working conditions are the environment in which one is expected to work. Staffing requirements will be dependent upon these conditions, as well as upon program philosophy. For example, if both charts on page 7 are consulted together, they suggest that fewer staff might be required when the following conditions are present:

- school enrollment falls at the lower end of the range;
- the size of the teaching staff falls at the lower end of the range;
- time-saving services are available, such as centralized district- or regional-level processing, which free the library media specialist for program work;
- the staff serve one building;
- the library media collection consists primarily of print materials;
- many library operations, such as circulation, bibliography preparation, and statistical reporting, are automated.

Staffing needs may fall at the higher end of the range suggested in the bottom chart on page 7 when the program philosophy is reviewed in conjunction with working conditions such as the following:

- school enrollment falls at the higher end of the range;
- the number of teachers falls at the higher end of the staffing range;
- minimal or no district- or regional-level time-saving services are available to free some of the library media specialist's time for program work;
- staff serve more than one building or have a wide range of grades to serve in one building—for example, kindergarten through 12th grade;
- the library media collection reflects a wide variety of materials, including books, audio-visual materials, and microcomputer software;
- library media operations are handled manually, or staff are beginning to convert to automated operations.

Reprinted from *School Library Media Programs: A Resource and Planning Guide*. The guide is available from the Wisconsin Department of Public Instruction, Publications Section for $15.00.

Appendix C

School Library Media Expenditures

School Year	Media Expenditures: Library Books, AV Materials, Newspapers, Magazines, Software, Microfilm, Other Media (NOT Textbooks)	Membership for Aid Purposes ***	Average Media Expenditures Per Pupil*	Common School Fund Allocations – Total for State	Average Common School Fund Per Pupil*	Average State Aid***	Average Local School District Contribution (excludes Common School Fund and State Aid)
70-71	$ 8,310,492	949,854	$ 8.75	$ 1,173,030	$ 1.24		$
71-72	9,139,717	958,565	9.54	1,319,340	1.38		
72-73	10,069,211	965,978	10.42	1,475,690	1.53		
73-74	9,811,566	957,197	10.25	1,690,960	1.77		
74-75	12,358,169	945,440	13.07	1,933,608	2.05		
75-76	12,266,457	928,224	13.22	2,301,668	2.48		
76-77	12,645,624	913,346	13.85	2,577,121	2.82	35.5%	7.11
77-78	12,564,265	885,535	14.19	3,016,159	3.41	35.0%	7.00
78-79	12,633,705	865,974	14.59	3,203,646	3.70	36.2%	6.95
79-80	12,975,799	834,109	15.56	3,595,660	4.31	37.6%	7.02
80-81	13,092,969	808,140	16.20	4,840,962	5.99	36.6%	6.47
81-82**	9,096,624	802,694	11.33	4,988,745	6.22	36.6%	3.24
82-83	9,454,249	775,198	12.16	6,061,000	7.81	39.2%	2.65
83-84	9,992,760	754,939	13.25	6,958,276	9.22	38.6%	2.47
84-85	10,577,974	745,702	14.18	8,158,000	10.94	38.6%	1.99
85-86	11,660,899	738,525	15.79	9,749,465	13.20	41.4%	1.48
86-87	12,075,115	741,040	16.29	10,470,937	14.13	42.1%	1.25
87-88	13,029,249	741,850	17.56	10,764,582	14.51	41.3%	1.80

* "Membership for aid purposes" used as divisor

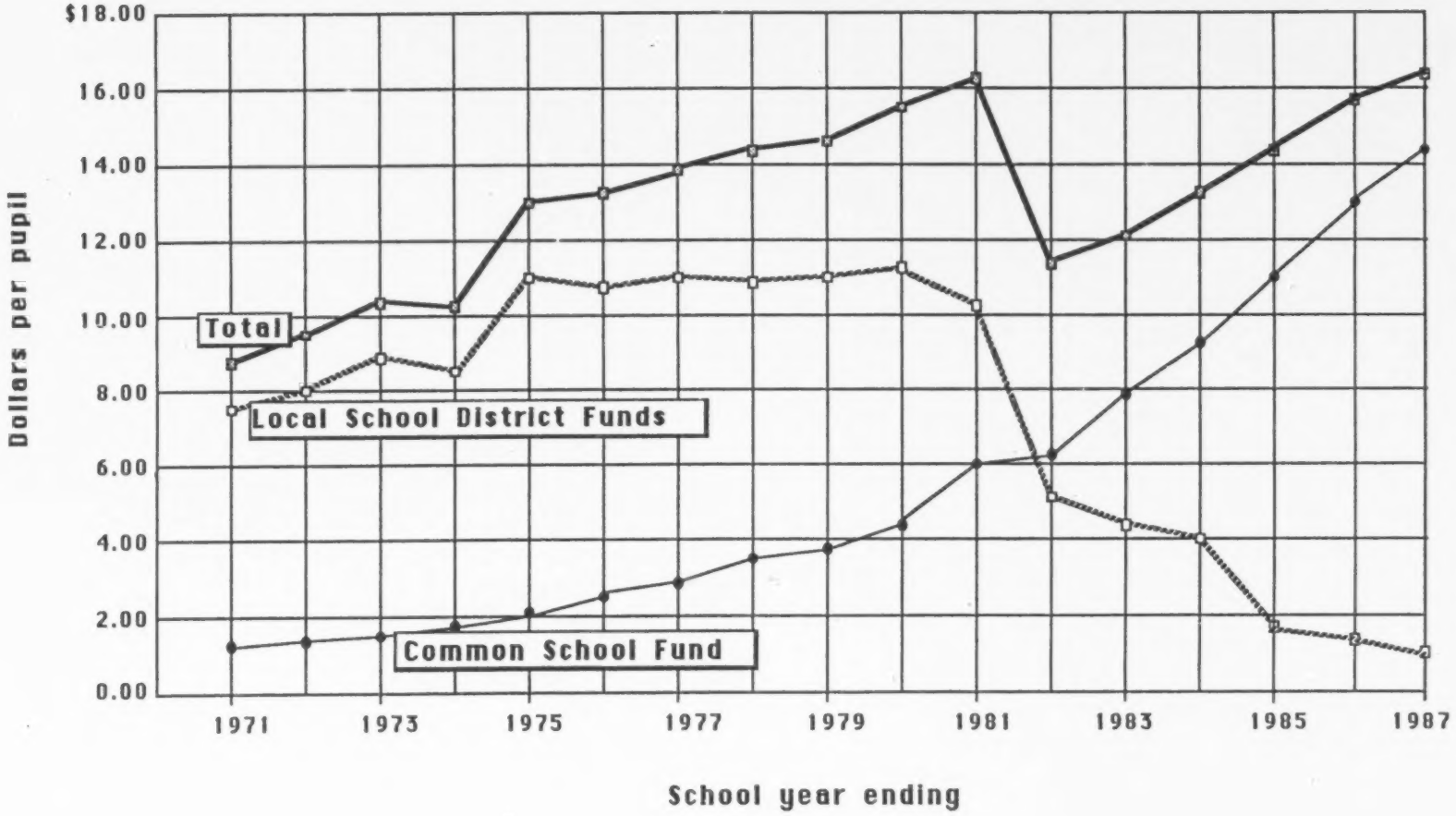
** Figures not consistent with preceding years. Includes only "support" function expenditures from 1981-82 to the present.

*** Taken from "Educational Statistics, Five Year Analysis," DPI, Bureau for Education Information Services.

Source: Wisconsin Department of Public Instruction
Bureau for Instructional Media and Technology

Appendix D

PER PUPIL EXPENDITURES FOR INSTRUCTIONAL MEDIA
1971-1987



Source: Wisconsin Department of Public Instruction, Bureau for Instructional Media and Technology

Appendix E

CHAPTER 2 ANTICIPATED EXPENDITURES FOR 1989-90

CATEGORY	PUBLIC SCHOOL PARTICIPANTS	PUBLIC SCHOOL ALLOTMENTS	% OF TOTAL	#DISTRICTS PARTICIPATING	PRIVATE SCHOOL PARTICIPANTS	PRIVATE SCHOOL ALLOTMENTS	% OF TOTAL	#DISTRICTS PARTICIPATING
151 At Risk Programs	37,027	$922,393	12.54%	59	634	$3,618	0.05%	4
152 Instructional and Curricular Materials	459,233	$3,002,497	40.81%	356	101,137	$915,216	12.44%	205
153 Effective Schools/School Improv. Programs	42,191	$409,035	5.56%	52	84	$341	0.00%	1
154 Staff Development Programs	94,415	$929,622	12.63%	116	709	$3,475	0.05%	8
155 Student Achievement Programs	47,145	$324,394	4.41%	51	1,229	$2,951	0.04%	6
156 Other Innovative Projects	92,962	$841,260	11.43%	107	671	$2,771	0.04%	3
GRAND TOTALS	772,973	6,429,201	87.38%		104,463	928,372	12.62%	

TOTAL SCHOOL DISTRICTS REPORTING	419
TOTAL INSTITUTIONS REPORTING	9
PRIVATE SCHOOLS PARTICIPATING	663

DOLLARS TURNED BACK NONPARTICIPATING PRIVATE SCHOOLS $98,737

Source: Wisconsin Department of Public Instruction
Bureau for School Management Services and Federal Aids, June, 1990